DOCUMENT RESUME

ED 213 153	EC 141 104
TITLE	Allegheny Intermediate Unit Exceptional Children's Program: Improved Individual Instruction Program. Final Report 1977-1980.
INSTITUTION	Allegheny Intermediate Unit, Pittsburgh, Pa.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	[81]
NOTE	169p.; Print is poor in parts. Some pages have been removed from appendix due to irreproducibility.
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Check Lists; *Computer Managed Instruction; Computers; *Educational Resources; Elementary Secondary Education; *Individualized Education Programs; *Learning Disabilities; Mathematics Education; Program Evaluation; *Reading Skills; Student Evaluation
IDENTIFIERS	Improved Individual Instruction Program PA; *Mathematics Skills; Pennsylvania (Pittsburgh)

ABSTRACT

The document reports 1979-80 progress of the Allegheny Intermediate Unit Exceptional Children's Program for Improved Individual Instruction in Pittsburgh, Pennsylvania. Part of the project is designed to develop new materials and resources for developing math and reading skills in learning disabled students. Progress is described for the following program components: resource materials, mastery tests, advisory council, staff identification and training, computer system development, and dissemination. Among the evaluation instruments developed were the teacher inservice evaluation form, an implementation and master teacher checklist, and individualized education program (IEP) collection instruments. A number of computer forms also resulted including the teacher data input form, the student checklist and progress form, and the suggested resource list. Problems which occurred in program implementation involved such areas as coding appropriate resource information in the computer data bank and computer staff turnover. Among major benefits were the systematic development of IEPs, successful use of the resource retrieval component, and the use of skill mastery tests as formal documentation of student developmental progress. Results from the third year's project evaluation showed a larger number of instructional objectives per child, increased numbers of updated objectives on each student's IEP, decreased amount of teacher time required to write and update IEPs, increased teacher knowledge/familiarity with new and/or different instructional resources, and computer generated program records which corresponded closely with teacher maintained records. Appendixes, which make up approximately half the document, include dissemination news articles, journal reports, and brochures; sample evaluation instruments; computer forms; a sample resource listing; a sample IEP; a sample performance report; and sample mastery tests. (SB)

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED213153

Allegheny Intermediate Unit
Exceptional Children's Program
Improved Individual Instruction Program
Suite 1300 - Two Allegheny Center
Pittsburgh, PA 15212

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Barbara Minick
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC141104

TABLE OF CONTENTS

SECTION		PAGE
1.	RESOURCES	1
2.	MASTERY TESTS	3
3.	ADVISORY COUNCIL.	3
4.	STAFF IDENTIFICATION AND TRAINING	4
5.	COMPUTER SYSTEM DEVELOPMENT	5
6.	DISSEMINATION	5
7.	SIGNIFICANT CHANGES IN PROJECT OBJECTIVES	6
8.	EVALUATION INSTRUMENT DEVELOPMENT	8
9.	COMPUTER FORM DEVELOPMENT	10
10.	DESCRIPTION OF REDIRECTION OF ACTIVITIES.	12
11.	MAJOR PROBLEMS INVOLVED WITH IMPLEMENTATION	14
12.	MAJOR BENEFITS OF THE PROJECT	16
13.	EVALUATION.	18
14.	DATA REGARDING PUPIL POPULATION	42
15.	PLANS FOR CONTINUATION.	42
16.	PRODUCT DEVELOPMENT	42
17.	CONTACT INFORMATION	43

APPENDICES

A - Dissemination newsarticles, journal reports, brochures

B - Evaluation Instruments

C - Computer Forms

D - Sample Resource Listing

E - Sample IEP

F - Sample Performance Report

G - Sample Mastery Tests

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDRENS PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

FINAL REPORT
1977 - 1980

On July 1, 1977, the Allegheny Intermediate Unit received a grant award for Program #520 AH 70057. An End of the Year Report was submitted in November, 1979.

Described below is the progress that occured in program components from October, 1979 through October, 1980.

Resources

Work on resource materials essentially falls within two areas: the computerized resource bank and the resource library. The resource file contains information to supply teachers with programs and techniques for remediation of specific skill areas. The resource library is designed to catalog the suggested materials in the computerized resource bank for distribution to teachers.

Since October, staff has continued to work on the task-analysis of new materials, matching resource components to individual skills on the math and reading checklist (the Learning Disabilities (LD) curriculum). This analysis of new resources is being entered into the computer bank on a continuous basis. At the present time, there are approximately 4,750 resources in the file. These materials cover the areas of reading and math. Resources have been coded according to their grade level, location and classified as priority or supplementary materials depending upon their availability to the classroom teacher.

In addition, materials which have been entered previously are being screened on a continuous basis for accuracy and applicability. Inappropriate resources are deleted from the computer banks.

Additional skills in math and reading had been added to the checklist during the project's second year, bringing the total of math skills to 235 and reading skills to 454. For these new skills, resource materials have been identified. Where commercial materials could not be found for particular skills, teachers and consultants developed original instructional materials.

Teachers continue to be enthusiastic about volunteering original teaching materials, games, learning centers and teaching strategies. Since these resources have been specifically designed for LD students and correspond directly to the skills list, teachers have found these materials especially beneficial. Therefore, teacher-made materials and strategies have been added to our data bank and the materials have been created for distribution to other teachers upon request. A special section of the resource library has been designed specifically for teacher-made resources. These have been developed with the aid of parent advisory council members, curriculum assistants and a curriculum aide.

During the months of May and June teachers and consultants redesigned the structure of the math and reading curricula, in an attempt to spiral the subskills of the checklists. This was done in an effort to streamline the assessment process, reaffirm the hierarchical design of related subskills, and to provide teachers with grade-level information on individual skills. Further revision of the math and reading assessments is needed and work is continuing in order to refine and condense the current testing instruments.

The resource library is also continuing to expand and develop. Resources have been cataloged and a filing system is operating to aid in the distribution of materials to teachers upon request. Dissemination of materials has been primarily by mail and via a film van delivery system already operating at the Allegheny Intermediate Unit.

Mastery Tests

Mastery tests for each of the 689 skills in reading and math were finalized by the months of May and June. Upon the request of teachers, these tests had been revised to assess students at a primary, intermediate and secondary level since a single test could not meet the needs of all three groups of students. There are now 2-3 separate tests for each of the skills on the math and reading checklist.

The mastery tests were developed by learning disabilities teachers, curriculum assistants and project staff. The full packet of tests for all levels in the areas of reading and mathematics were ready for distribution to teachers in August, 1980.

Review and refinement of the tests will continue in order to maintain the best quality assessment for each skill. Teachers provide feedback to project staff on an ongoing basis regarding the appropriateness of individual mastery tests.

Advisory Council

The Advisory Council has become a firmly established organization within the AIU Learning Disabilities Program. Monthly meetings are conducted to review project operation and provide feedback. Scheduled speakers are a regular part of the agenda and members now provide input on a much wider scope of program operations.

Members work with program staff to organize a large parent meeting in the spring of each year. The group is now beginning to organize a Public Relations campaign for the spring, 1981 meeting.

Monthly newsletters are sent to all members recapping each meeting and announcing the agenda for the coming session.

Staff Identification and Training

Following the field-testing phase in the spring of 1978 which involved 4 teachers in the manual operation, and the summer field-test, involving 2 teachers in the computerized operation; 12 experimental teachers were chosen for the pilot phase which began in September, 1978.

In-service sessions for the 12 experimental group teachers were conducted in August, November, 1978 and March, June, 1979. In-service programs for the 12 control group teachers were held in November and June, 1978-79. Additionally, all 150 LD teachers who would participate during 1979-80 received periodic updates on the project.

The 12 experimental group teachers participating in the pilot phase provided input for modifications of the program. Some of the changes again involved the computer forms. Due to the massive amount of data stored per child in the computer bank, it was necessary to redesign the student checklist on an Optical Scan form. Teachers contributed significantly to the design of the scan form, suggesting ways that individual skill descriptions could be provided on the forms as well as spaces for mastery test scores. The idea of having the computer generate protions of the IEP also came from the teachers and they suggested ways of redesigning the student data input forms to provide more information on the IEP.

As stated in the original proposal, full implementation of the program began in September, 1979 involving 150 LD teachers and ± 2,400 students. An in-service session for these teachers was conducted in August, 1979. The 12 experimental teachers from year two and the LD Master teachers operated small group training sessions. Separate in-service sessions for the experimental teachers and Master teachers had been conducted prior to the large group sessions.

Follow-up training sessions were conducted on an individual basis by project staff and previous project teachers as new participants indicated the need. The project director met with small groups of teachers at regularly scheduled meetings conducted during the months of November-December, and March-April-May. The focus of these meetings involved modifications of the computer system, revisions to the math and reading curricula and strengths/weaknesses of the overall program.

Individual meetings with project teachers continued throughout the year as did the in-servicing process as new teachers joined the staff.

Computer System Development

To provide for the large number of students who entered the project in September, a scan sheet was designed to replace the Student Checklist and Progress Form. The three programs that use the Checklist have been modified accordingly to process from the Optical Scan form.

Another scan sheet was designed to link teachers with the students on their class rosters. A program has been written to process this information. It has also been necessary to expand all existing files to accomodate the large influx of students in the system.

Since September, the main activity has involved the processing of requests and other information that were received from teachers and printing the IEP's, Performance Reports and Resource Request forms. Programs were optimized to improve efficiency, enabling them to run faster with more effective use of computer software.

Dissemination

Dissemination efforts increased during the third year of the project.

News articles explaining the project were disseminated to state and local newsletters. Journal and magazine awareness articles have been written and will be distributed to various education and computer journals/magazines. An informative brochure exlaining the purposes of the computer-generated portion of an IEP has been designed primarily for use during parent conferences (a sample has been included in Appendix A). An awareness brochure was also prepared for dissemination to interested parties. A dissemination packet of sample project components has been compiled as a follow-up to the brochure.

Project staff made a presentation and submitted a paper for inclusion in the proceedings of the 1980 National Conference of the Association for the Development of Computer-Based Instructional Systems held in April in Washington, D.C. The project director also presented on the program at the International Conference of the Council for Exceptional Children conducted in Philadelphia, Pennsylvania in April, 1980.

Significant Changes in Project Objectives

There have been no significant changes in project objectives during year three. Slight modifications in project objectives were explained in detail in the 1979-80 continuation proposal. These modifications were necessary for year three due to the absence of control groups for comparison.

Results of Program Operations during Year Three

Activities during the third year focused on full implementation of the program in all 150 LD classes, involving ± 2,400 students in grades Kindergarten through 12.

Resources in the data bank were evaluated on a continuous basis and staff are continuing to enter new resources for various skills. Teacher-made materials and learning center development was extended and entered into the computer bank along with instructional strategies. Resources were located and/or developed to cover scant skill areas.

Project staff, LD teachers and curriculum consultants attempted to spiral the reading and math checklists, arranging skills hierarchically and assigning grade levels to the subskills.

Modifications of the computer system continues to be an on-going process. Several of the computer forms have been revised on a scan form designed to allow for the massive data entry which is received. Teachers involved in the pilot phase reviewed and suggested several changes in the computer forms and delivery system which have since been implemented.

The organization and development of the resource library is an on-going process as well. Most materials were transported for distribution to classes either via mail or a van delivery system which is already operating at the Intermediate Unit.

An additional aspect of the resource center was implemented during year three. Staff organized a bank of taped resources and textbooks to aid in auditory instructional methods. With the assistance of parent advisory council members this component was expanded and added to the resource center during the third year. In addition, project staff has obtained the assistance of a church organization which has assumed the major operations of the taping process for the program on a consistent basis.

Parent council members have assisted in the development of curriculum materials and mastery tests as well as continuing to code resources, tape textbooks, and provide input on project operation. Council members participated in a large LD parent meeting held in November, 1979 at which the Advisory Council designed a booth exhibiting project materials for others to view.

The original proposal specified that close scrutiny would be given to the relationship of this project to the IEP and teacher/parent/supervisor reporting process. An exciting spinoff from the project during year three directly involved the IEP process.

As explained in the 1979-80 continuation proposal, teachers and administrators noted the close relationship between the student Performance Report forms and the IEP. The decision was made to develop an IEP format and field-test the computer-printed portion in the 12 experimental classrooms. Feedback from teachers and parents was very positive and supportive of the new format.

During the third year of operation, the computer-generated IEP format was used for the ± 2,400 students in the LD program. Evaluation was collected on the reactions of supervisors, teachers and parents to the format of the computer-generated portion of the IEP and appears in the Evaluation section of this report.

Evaluation Instrument Development

Evaluation instruments which have been developed throughout the 1978-1979 period for use include:

1. Teacher Inservice Evaluation Form: Assesses the effectiveness of the presentation and teacher understanding of the materials.
2. Implementation and Master Teacher Checklist: The Implementation Checklist assesses teachers' perceptions of the efficiency and effectiveness of the computer system. The Master Teacher Checklist addresses the same concern via classroom observation.
3. Evaluation of Resource Materials: Teachers provide information on the effectiveness and appropriateness of resource materials in the data bank by using this form.

4. Teacher Resource Knowledge Survey: Assesses teachers' knowledge of appropriateness of certain resources matched to skill areas and modalities of learning.

5. IEP Collection Instruments: Assesses the number of instructional objectives set per child; the number of updated objectives and time required to write/update an IEP.

6. IEP Rating Form: Rates the adequacy and accuracy of an IEP.

7. Accuracy Checklist: Checks the accuracy of the computer record alongside teacher records in the areas of initial assessment, grading period update, and year-end summary.

8. Completeness Checklist: Lists type of information (data) that should be or are included in reports to parents and school districts.

9. Supervisor Questionnaire: Assesses LD supervisory staff on their perceptions of the efficiency of the computer program.

10. Parent Questionnaire: Rates the adequacy of the information and the frequency of the Performance Report Form, as well as overall satisfaction with the program.

11. Teacher Evaluation of Computer-Generated Portion of the IEP: Teachers provide information on the completeness, adequacy, efficiency and flexibility of the computer-generated portion of the IEP.

12. Parent Evaluation of The Computer-Generated Portion of the IEP: Parents provide information on their reactions concerning the completeness, adequacy, efficiency and flexibility of the computer-generated portion of the IEP.

Copies of all evaluation instruments are contained in the appendices of this report.

Computer Form Development

The computer forms which have been developed and revised for use include:

1. Teacher Data Input Form: Establishes a data file with identifying information on teachers in the program for the purposes of linking a teacher with a student in the class.
2. Student Data Input Form: This information will be stored in the student file of the computer. This will save the teacher further work, since all necessary background information can be accessed from the computer rather than the teacher. Periodic updating of information will keep the files current.
3. Student Checklist and Progress Form: This establishes the data bank which will store complete assessment and performance information on a student. Specific scores for mastery levels on each strand/skill can also be stored. This enables teachers, parents and supervisors to have a very detailed profile of student performance whenever needed. This form has been redesigned onto an Optical Scan form due to the massive amount of information that it provides to the computer.
4. Request for Resource Material: The information on this form is sent to the computer. From this the teacher will receive a print-out of suggested materials for each strand/skill he/she has indicated for each student.
5. Suggested Resource List: For each strand and skill number requested by the teacher at least two resource materials will be

given. Some, or all, of the following information will be given on the resource materials:

1. PUBLISHER
2. PROGRAM TITLE
3. TITLE OF BOOK
4. LEVEL
5. EDITION NUMBER OR PUBLICATION DATE
6. PAGE NUMBERS
7. REACH NUMBER (Library Order Number for materials located at the Western Pennsylvania Special Education Regional Resource Center.)

For grouping purposes, a list of student numbers will also be given by strand/skill numbers. This indicates the students by strand/skill needing remediation and with whom suggested resources may be used.

6. Addition to Resource List: When resources are requested for individual students between grading periods, this sheet will be generated indicating students and strand/skill numbers which should be added to the original print-out.

7. Performance Report Form: From the information entered on the Student Checklist/Progress form, a very specific report can be produced indicating a student's performance during each grading period. This report will indicate skills actually receiving instruction during each marking period and will also show instances of student frustration and/or regression.

8. Request for Specific Resources or Mastery Tests: From the information provided on the Suggested Resource List, teachers

may request specific materials or mastery tests they would like to receive from the resource library.

9. Computer-Generated Portion of the IEP: A portion of an IEP can be generated from the initial assessment information given by the teacher. This does not represent a complete IEP but identifies certain basic demographic data and skill areas in reading and math needing remediation. Annual goals, short-term objectives and evaluation procedures are listed on the IEP.

10. Request for Computer-Generated Materials: This form provides a listing of all students in a teacher's class and a checklist of forms the teacher wishes to receive for those students. The teacher uses this form as a cover sheet to request desired services from the computer center.

Copies of all computer forms are included in the appendices of this report.

Description of Redirection of Activities

During the planning sessions for second and third year evaluation instruments, it was decided that modification in three forms would be necessary.

As explained earlier, the Student Checklist and Progress Form which was a manually entered program, had been redesigned on an Optical Scan form. This change was mandatory if computer staff was to handle information on ± 2,400 students during the third year. All information from the original form remains the same on the scan form; only the delivery system has changed for ease and efficiency of entry.

Another modification involves the population to whom the Completeness Checklist was administered. The original proposal specifies that this instrument be administered to school district superintendents. After some discussion, project staff felt superintendents were not as familiar with the content of Allegheny Intermediate Unit year-end reports as were individual school district principals who worked directly with the Allegheny Intermediate Unit, Learning Disabilities teachers. Therefore, principals were asked to complete this form during year two. This form was later eliminated for school district principals as well, since teachers indicated that principals did in fact find the specificity of the performance report helpful but the evaluation instrument itself was needless to access this information.

It was also decided that all information needed from parents was quickly incorporated on the one parent questionnaire therefore eliminating the need to have parents complete both the completeness checklist and questionnaire forms.

A third modification involved the administration of the pre and post achievement test. Upon consideration of the original proposal and the realities of the number of children to be involved during the second and third years, staff felt that individual administration of the Woodcock Reading Mastery Test and Key Math Diagnostic Arithmetic Tests was unrealistic. The amount of time needed to administer the tests to ± 2,400 students the third year would be impossible.

As stated in the third year continuation proposal, the California Achievement Tests were considered as an alternative tool in place of the Woodcock and Key Math tests. Upon closer examination, this test was not a more efficient test requiring less time to administer and score. The Wide Range Achievement Test was considered a viable alternative since it would increase efficient administration, require less time, yet yield individual reading and math scores. Therefore, evaluation data was collected using this instrument as a basis for measuring achievement.

Major Problems Involved with Implementation

Initially, the project was hampered by a two month delay in start-up. This delay was later compensated through a two month time extension during year one. However, field-testing of the program had to be extended throughout the summer months of year one in order to properly monitor the computer system.

Another problem area initially involved the distribution of resource materials. The original proposal specified that appropriate resource information would be coded in the computer data bank. These materials would be located, identified and distributed/traded among all 150 classrooms. This procedure proved to be a logistical nightmare. A workable alternative was the development of a lending resource center which makes all materials available to all teachers on a loan basis.

The process of mastery test development was not a problem in so much as it was a very lengthy, time-consuming operation. As development began, teachers indicated the need for levels of mastery tests, since one assessment was not appropriate for all students in the primary, intermediate and secondary grades.

Computer system development was an ongoing process with computer staff and teachers working cooperatively to solve problems throughout the pilot and implementation phases. At the start of the project, all input was done manually at the computer terminal. The forms completed by the teachers were quite lengthy and complex; and the input process was time-consuming. For use during the third year, a scan sheet was designed to replace the manually completed Student Checklist and Progress Form. This necessitated rewriting the computer programs in order to process the Optical Scan form.

Operational problems evolved during the third year when full implementation was initiated with all 150 LD teachers. Since the AIU did not own an Optical Scanner to process the Checklist forms, arrangements were made with a nearby school district to process the forms and send the information to the AIU. This created a slight delay in turn-around time. In the future, this delay will be remedied since the AIU has purchased its own scanner.

Another operational problem occurred simply because the increase from 12 teachers to 150 teachers was significant. Computer staff could not foresee system problems that would occur as a result of this sharp increase in teacher and student data. The influx necessitated several modifications. Programs had to be rewritten; computer memory and storage (disk space) had to be expanded and an additional disk was purchased. Computer staff personnel rotated on shifts so IEP's and other project forms could be processed during non-peak periods. Processing timelines were suggested to maximize efficiency in providing teachers with IEP's in a minimum of time.

Throughout the period of the project, computer staff turnover caused delays in operation. The most notable delay occurred during the final months of the third year, necessitating the two-month time extension until October 31, 1980.

Major Benefits of the Project

The most significant advantage of the project for teachers, administrators and parents seems to be the systematic development of Individual Education Plans. That teachers find the system beneficial is evidenced through requests made by AIU teachers in other exceptionalities who desire to be included on the system. As mentioned earlier, the possibility of including other areas is being explored for the coming year.

Parents, too, express their pleasure in the project's assistance with IEP development because they feel that they can sit and talk during an IEP conference without "feeling guilty about taking up the teacher's time when she has so much writing to finish."

Administrators have found the project to be beneficial in tracking student progress. Administrators from other exceptionalities are seriously considering expanding the system during coming years for their teachers.

Formal evaluation indicates that there is a slight increase in the actual number of objectives written on the IEP using the system - especially at the elementary level. There is a significant increase in the number of IEP objectives updated, as well, when using the computer system. Although the timesavings involved with use of the computer system is a question, it appears that teachers, parents and administrators find that the real value rests with the efficiency and accountability provided by this program. Further, project staff speculate that as teachers become more familiar with the opreations/materials of the system, time spent on IEP development will in fact, decrease.

Another benefit of the project has been evidenced informally through teacher-project staff interaction but was not documented on formal evaluation. The resource retrieval component of the system is used successfully by a number of teachers. It is of major benefit to new and inexperienced teachers within the LD program. In addition, the use of the resource library seems to increase as teachers become more familiar with the operation of the overall computer program. Once again, it is the speculation of project staff that as familiarity with the computer program increases, wider use will be made of the resource component. Year Three was the first time 138 teachers used the computer program. For these teachers, introduction to both components may have been more than they could handle. It is interesting to note, however, that the 12 project teachers from year two made greater use of the resource library during the third year - leading project staff to believe that use of the program is a developmental process.

A third advantage of the program for some teachers are the skill mastery tests. Many teachers use these as formal documentation of student progress and share results with the parents.

Lastly, the Advisory Council has become a firmly established group within the LD program. Parents and administrators alike value the growth in communication that has developed as a result of the council. Parents are becoming more involved with all areas of the LD program and will continue to operate as a group at the conclusion of formal project activities.

Evaluation

During the third project year, a wealth of evaluation data were collected to assess the effectiveness of the III Program in meeting its goals and objectives. These data were gathered from participating teachers, school administrators, and parents. In the following section, the methods and procedures used to evaluate each of the ten program objectives are described and summarized. Supporting tables and figures are given along with the text.

--Objective 1

The first program objective specified in the original proposal hypothesized that teachers would be able to set a larger number of instructional objectives per child, as a result of project participation. In order to determine if this objective was achieved, information was collected from the 12 teachers who served as the control population in the second project year (1978-79). Specifically, we compared the number of objectives written per child by these teachers in year 2 (before they participated in the program) with the number of objectives they wrote in year 3 -- after the computerized system was implemented in their classrooms.

Since we chose to use the student as the unit of analysis, our sample size was rather small. Owing to student attrition, complete IEP data for the two project years was available for only 48 students.

The analysis conducted on these data are presented in Table 1. As the reader will note, we divided the student population by grade level and performed separate analyses for elementary and secondary level students. Correlated t-tests were conducted within each sub-population.

Table 1

Correlated t-tests on Number of Objectives (Year 2 v. Year 3)

Elementary	N	$\bar{X}$	S.D.	Mean Difference	t
Year 2	21	45.81	17.08	28.52	2.41*
Year 3		74.33	48.64		
Secondary					
Year 2	27	41.37	19.29	5.67	1.21
Year 3		47.04	23.25		

*significant @ the .05 level

Results from these analysis show that at the elementary level, there was a sizable and statistically significant increase in the average number of objectives written per student from year two to year three. Although the number of objectives written for students at the secondary level also increased, this gain was considerably smaller and non-significant.

--Objective 2

The second objective specified by the project was to increase the number of objectives updated on each student's IEP. In order to address this objective, we examined the average number of updates made per student during the second and third project years by the second year control group teachers. Again, we used the student as the unit of analysis.

Results from our analysis are straightforward, and are displayed in Table 2.

Table 2

Correlated t-tests on Number of Objectives (Year 2 v. Year 3)

Elementary	N	$\bar{X}$	S.D.	Mean Difference	t
Year 2	21	17.38	8.26	34	5.09*
Year 3		51.38	28.42		
Secondary					
Year 2	27	17.37	7.18	14.44	3.33**
Year 3		31.81	20.33		

*significant @ the .001 level
*significant @ the .01 level

As can be seen, the average number of objectives updated increased significantly in the third project year. The means displayed in this table show that for both primary and secondary students, an average of 17 objectives were updated during year two. In year 3, when teachers could benefit from the computerized information offered to them by the project, an average of 51 and 31 objectives were updated for primary and secondary students, respectively.

Clearly, the second objective of the III Program was more than satisfactorily achieved. These results must be taken as a positive and important project finding.

--Objective 3

It was hypothesized that as a result of program participation, less teacher time would be required to write and update IEPs. In order to evaluate this hypothesis, all LD teachers were administered an "IEP Questionnaire" in the spring 1979, and then again in the spring 1980. This Questionnaire asked teachers 1) to estimate the average amount of time they spent writing an IEP, and 2) the average amount of time they spent updating an IEP.

To determine if the hypothesized reduction in time was evidenced, we compared the responses of the 68 non-project teachers who completed this Questionnaire in 1979 with the 66 responses collected from teachers (all of whom were involved in the project) in 1980.

Summary statistics and frequency distributions displaying teacher estimates of time required to write and update an IEP are displayed in Tables 3 and 4.

Table 3

Frequency Distribution and Summary Statistics: Average Time Required to Write an IEP (Year 2 v. Year 3)

Estimated Time to Write an IEP (in minutes)	1978-79 Year 2		1979-80 Year 3	
	N	%	N	%
20	0	0	2	3.0
30	2	2.9	1	1.5
45	2	2.9	1	1.5
60	6	8.8	28	42.4
75	8	11.8	0	0
90	14	20.6	14	21.2
105	3	4.4	0	0
120	13	19.1	9	13.6
135	2	2.9	0	0
150	7	10.3	4	6.1
180	2	2.9	0	0
195	1	1.5	0	0
210	1	1.5	4	6.1
240	2	2.9	1	1.5
300	2	2.9	0	0
375	1	1.5	0	0
450	0	0	1	1.5
510	1	1.5	0	0
600	1	1.5	0	0
1080	0	0	1	1.5
	68	*99.9	66	99.9
	$\bar{X}_2$	= 130.81	$\bar{X}_3$	= 111.29
	SD_2	= 96.97	SD_3	= 136.13

*error due to rounding

Table 4

Frequency Distribution and Summary Statistics: Average Time Required to Update an IEP (Year 2 v. Year 3)

Average Time to Update an IEP (in minutes)	1978-79 Year 2 N	%	1979-80 Year 3 N	%
10	2	3.2	0	0
15	4	6.4	1	1.5
20	2	3.2	1	1.5
25	3	4.8	0	0
30	10	15.9	18	26.1
35	1	1.6	0	0
40	1	1.6	2	2.9
45	9	14.3	6	8.7
60	8	12.7	18	26.1
75	1	1.6	0	0
80	1	1.6	0	0
90	7	11.1	8	11.6
105	2	3.2	0	0
120	4	6.4	9	13.0
150	2	3.2	2	2.9
180	2	3.2	0	0
210	2	3.2	0	0
270	0	0	1	1.5
300	2	3.2	0	0
360	0	0	1	1.5
540	0	0	1	1.5
	63	*100.4	69	*100.3
	$\bar{X}_2$ =	73.17	$\bar{X}_3$ =	79.06
	SD_2 =	63.20	SD_3 =	79.7

*error due to rounding

As the data in these tables show, the average reported time required to write an IEP decreased by almost 20 minutes, while the average reported time to update an IEP increased by slightly more than five minutes. Teachers who have reveiwed these data generally believe them to be accurate. Further, it is noteworthy that many teachers have commented that as a result of the program, they have been able to prepare IEP's more efficiently.

--Objective 4

The fourth objective specified in the original project proposal hypothesized that teachers would acquire a greater knowledge of appropriate instructional resources as a result of program participation. In order to measure this objective, all teachers new to the program in the 1979-80 school year were asked to complete a "Teacher Resource Questionnaire." One-hundred thirty-six teachers completed this questionnaire in the fall 1979, and 73 completed this questionnaire in the spring 1980. A copy and tabulation of the results are presented in Tables 5 and 6.

Results from this questionnaire show some, though not a great deal, of change in these teachers' self-reported knowledge of instructional resources. For example, in the fall 1979, approximately 74 percent of the teachers indicated that they had been either "somewhat" or "very" familiar with new and/or different resource materials during the previous (1978-79) school year.* In the spring 1980, the percentage of teachers responding in this way increased slightly -- to approximately 86 percent. On the other hand, results indicate that there was virtually no change in the percentage of teachers who responded that they actually used a wider range of resource materials in the current academic year.

---

*When this questionnaire was administered in the fall 1979, teachers were asked to respond based on their recollections of the previous (1978-79) school year.

These responses were rather surprising in light of previous findings that emerged from the second year evaluation. Briefly, this evaluation, which compared the 12 experimental and 12 control group teachers, found significant differences between the two teacher groups. Specifically, a larger percentage of teachers in the experimental group than in the control group, indicated that they were familiar with new and different resource materials. And, a much larger percentage of Improved Individual Instruction Program teachers indicated that they used a wider range of materials during Improved Individual Instruction Program than in previous years (82 v. 27 percent).

Inadequacies in the wording of items on this questionnaire provide one possible explanation for these ambiguous results. It is also conceivable that pre-existing differences in the sample of teachers who responded to this questionnaire at the various time points make suspect any conclusions that can be drawn at the aggregate level.

Table 5

TEACHER RESOURCE QUESTIONNAIRE (Fall, 1979)

Question	Very Familiar	Somewhat Familiar	Unfamiliar	Don't Know
1. How familiar are you with new and/or different resource materials that you do not necessarily have in your classroom? (You do not need to know the specific names of the materials.) (n=136)	9 (6.6%)	91 (66.9%)	32 (23.5%)	4 (2.9%)
2. How familiar are you with new and/or different resource materials known by their specific names? (n=135)	8 (5.9%)	87 (64.4%)	36 (26.7%)	4 (3.0%)

	Wider Range	Same as Always	Fewer than in previous years
3. Based on your experience of previous years, did you use a wider range of resource materials this year? (n=125)	64 (51.2%)	45 (36%)	16 (12.8%)

	Yes	No	No Difference
A. If you did use a wider range of resource materials:			
Do you feel this wider range of knowledge about resource materials assisted you professionally? (n=71)	69 (97.1%)	1 (1.4%)	- (0%)
Do you feel this wider range of knowledge about resource materials was beneficial instructionally? (n=70)	69 (98.5%)	1 (1.4%)	- (0%)
B. If you did not use a wider range of resource materials this year:			
Did you become aware of more materials that you may want to use in the future? (n=65)	38 (58.5%)	12 (18.5%)	15 (23%)

TEACHER RESOURCE QUESTIONNAIRE (Fall, 1979) Cont.

Questions	Yes	No	Don't Know
5. Do you feel you had more materials available to you this year if you had wanted to use them? (n=117)	51 (43.6%)	42 (35.9%)	24 (20.5%)

	Very Often	Frequently	Sometimes	Infrequently	Never
6. Please check the option that best applies to your situation:					
I try to use new and different materials other than those in my classroom (n=136)	28 (20.6%)	59 43.4%)	45 (33.1%)	4 (2.9%)	- (0%)

Table 6

TEACHER RESOURCE QUESTIONNAIRE (Spring, 1980)

Question	Very Familiar	Somewhat Familiar	Unfamiliar	Don't Know
1. How familiar are you with new and/or different resource materials that you do not necessarily have in your classroom? (You do not need to know the specific names of the materials.)	4 (5.6%)	58 (80.6%)	8 (11.1%)	2 (2.8%)
2. How familiar are you with new and/or different resource materials known by their specific names?	4 (5.1%)	59 (75.6%)	14 (17.9%)	1 (1.3%)

	Wider Range	Same as Always	Fewer Than in Previous Years
3. Based on your experience of previous years, did you use a wider range of resource materials this year?	38 (53.5%)	26 (36.6%)	7 (9.9%)

	Yes	No	No Difference
4. If you did use a wider range of resource materials:			
Do you feel this wider range of knowledge about resource materials assisted you professionally?	36 (87.8%)	0	5 (12.2%)
Do you feel this wider range of knowledge about resource materials was beneficial instructionally?	34 (89.5%)	1 (2.6%)	3 (7.9%)
If you did not use a wider range of resource materials this year:			
Did you become aware of more materials that you may want in the future?	21 (56.8%)	7 (18.5%)	9 (24.3%)
5. Do you feel you had more materials available to you this year if you had wanted to use them?	41 (64.1%)	9 (14.1%)	14 (21.9%)

TEACHER RESOURCE QUESTIONNAIRE (Spring, 1980) Cont.

	Very Often	Frequently	Sometimes	Infrequently	Never
6. Please check the option that best applies to your situation:					
I try to use new and different materials other than those in my classroom.	12 (16.7%)	19 (26.4%)	38 (52.8%)	3 (4.2%)	0

--Objective 5

It was anticipated that the IEP's written by teachers new to the project would be of the same or of higher quality than those which they wrote in previous years. In order to determine if this objective was achieved, two experts were asked to rate a sample of 79 IEP's prepared in year three by the 12 former control group teachers. Each IEP was rated on two dimensions: 1) the adequacy of the objectives, and 2) the adequacy of the overall IEP. Ratings were made along a three-point scale where "1" represented "very adequate" and "3" represented "inadequate". We then compared the average values obtained from these ratings with the ratings of 56 IEP's (prepared by the same teachers) which were made during the second project year. Summary statistics are presented in Table 7 below.

Table 7

IEP Ratings: Year 2 *v*. Year 3

Dimension 1: Adequacy of Objectives	N	$\bar{X}$	S.D.
Year 2	56	1.25	.513
Year 3	79	1.56	.656
Dimension 2: Overall Adequacy			
Year 2	56	1.71	.594
Year 3	79	1.49	.618

By examining the means presented in this table, it is seen that there was little change in the judged adequacy of the IEP's across project years. With respect to the first dimension -- adequacy of the objectives -- the average ratings were 1.25 and 1.56 for IEP's prepared during the second and third project years, respectively. This result seems to suggest that, if anything, the IEP's prepared by these teachers during the third project year were found somewhat less adequate. In contrast, the overall adequacy of IEP's prepared during the third year received slightly higher ratings than those prepared and tested in the second year (1.71 v. 1.49).

Several factors make it impossible to draw reasonable inferences from these data. First, lack of inter-rater reliability appears to have been a major problem. Indeed, after these data were collected, it became obvious that one of the raters had applied a stricter set of standards in judging the IEPs. Second, the fact that these ratings were made at two different time points makes it difficult to equate them. That is, it is quite likely that the evaluative perspective assumed by each rater changed over the two project years.

--Objective 6

In order to determine whether the computer-generated Improved Individual Instruction Program provided an accurate accounting of testing and educational data for each child (Objective 6), an "Accuary Checklist" was devised. An independent observer used this checklist to rate the extent of agreement between computer-generated records and teacher maintained records. A random sample of records and reports for 101 students were selected and rated at several time points during the third project year. The observer rated agreement of records on at least one of the following: 1) initial assessment; 2) skill remediation; 3) times of updates; and 4) end-of-year performance.

Results from the Accuracy Checklist are displayed in Table 8. As these data show, there was almost perfect agreement between the teachers' paperwork and the computer-generated records.

Table 8

RESULTS OF IIIP ACCURACY CHECKLIST

Year III

Item	Yes		No		Total
	N	%	N	%	
1. Strand and skill numbers requested during initial assessment matched the resources.	26	100	0	0	(26)
2. Strand and skill numbers needing remediation matched those specified on the Performance Report Form.	95	96.9	3	3.1	(98)
3. Teachers Update of Progress in skill areas matched computer records on year end report.	34	100	0	0	(34)
4. Skill mastery and grading period on teacher's record matched Performance Report at year end.	34	100	0	0	(34)
TOTAL	89	98.4	3	1.6	(192)

(101 records rated)

--Objective 7

It was anticipated that the reports and records produced during the third year of the III Program would be more complete and useful than those produced during previous years. In order to determine if this objective was achieved, former control group teachers were administered a modified version of the "Completeness Checklist", an instrument field tested during the second project year.

Results from this checklist are displayed in Table 9. These results may be compared with those obtained from the second project year, displayed in Table 10.

As the reader will observe, the pattern of responses was largely encouraging. For example, the majority of the teachers indicated that they had systems for both listing skill breakdown and reporting student progress. In contrast, in the second project year, only two of the teachers indicated that they possessed such systems. Further, both the tests and performance codes were evaluated as either "somewhat" or "very" useful by these teachers. The resource printouts, however, were not so uniformly rated as helpful: Only one teacher found the printouts "very" helpful, three teachers found them "somewhat" helpful, and three teachers indicated that they were "not helpful at all." As mentioned previously, project staff feel that this component of the computer program is more easily understood during later years of the project, as teachers become more familiar with system operations.

TABLE 9

RESULTS OF IIIP COMPLETENESS CHECKLIST

Year III

	YES	NO
Do you have a system for listing skill breakdowns into specific skill areas per student in your L.D. classroom?	7	3
Do you have a system to report progress that was made in skill areas for each student during the year?	8	2
Do you feel the performance codes on the computer-generated forms adequately indicate performance made by the students in your L.D. classroom?	8	2
Have you received the printouts of suggested resource lists for students in your classroom?	9	1
Have you received copies of mastery tests to be used with students in your classroom?	7	3

	VERY COMPLETE	SOMEWHAT COMPLETE	NOT COMPLETE AT ALL
How complete is your system in terms of listing only skills needing remediation for each student?	2	4	0
How complete is your system in terms of accurately reporting progress for each skill during each grading period?	1	8	0
How complete are the performance codes in terms of accurately indicating student progress?	5	3	0
How complete were the printouts in terms of information accuracy and resource appropriateness?	3	2	0
How complete were the tests in terms of accurately assessing student performance at an appropriate level?	1	4	0

	VERY HELPFUL	SOMEWHAT HELPFUL	NOT HELPFUL AT ALL
How helpful are the performance codes?	5	3	0
How helpful were the printouts?	1	3	3
How helpful were the tests?	1	6	0

TABLE 10

COMPLETENESS CHECKLIST FOR CONTROL TEACHERS (Year II)

	YES	NO	
1) Do you have a system for listing skill breakdowns into specific skill areas per student in your LD classroom?	2	11	
	VERY COMPLETE	SOMEWHAT COMPLETE	NOT COMLETE AT ALL
If yes, how complete is your system in terms of listing only skills needing remediation for each student?	0	0	2
	YES	NO	
2) Do you have a system to report progress that was made in skill areas for each student during the year?	1	12	
	VERY COMPLETE	SOMEWHAT COMPLETE	NOT COMPELTE AT ALL
If yes, how complete is your system in terms of accurately reporting progress for each skill during each grading period?	0	1	0

--Objective 8

It was expected that as a result of the project, supervisors would become more knowledgeable about the educational status and progress of students in III Program classrooms. The chief mechanism used to assess achievement of this objective was a "Supervisor Questionnaire", developed in the second project year. Although this survey was administered as scheduled in the spring 1980, the results were unfortunately misplaced.

Although no objective data were available to evaluate supervisor knowledge, project staff is convinced that supervisors continued to be satisfied with the information on student progress they were being given. Project staff maintained ongoing communication with supervisors, and continually received feedback from them. Thus, it is reasonable to believe that the generally positive findings which emerged from the second year evaluation would have been evidenced in a subsequent, third year analysis.

--Objective 9

The project also endeavored to encourage parental knowledge of the educational status and progress of students in III Program classrooms. In order to measure parental satisfaction with the program, a questionnaire was administered to a sample of parents of participating students. Three-hundred seventy-three parents completed this questionnaire during the third project year. A copy of the questions and tabulations of the responses are given in Table 11.

Results from this questionnaire indicate that in general, the parents surveyed were quite satisfied with the type of information they were given concerning their child's educational status. More specifically, nearly all parents felt they were currently being given more information about their child's educational skills and progress than they had been given previously. Most parents also indicated that they were satisfied with the format of the Performance Report Forms and the frequency with which they received it. Further, the responses suggest that parents found the goal and skill descriptions as well as the performance codes easy to understand.

--Objective 10

The final objective specified by the project hypothesized that students in the IIIP classrooms would show gains in math and reading at least as large as those displayed during previous years. In order to determine if this objective was achieved, students were administered the Wide Range Achievement (WRAT) in the fall and spring of each academic year.

The pre/post gains in raw scores on the Math and Reading subtests of the WRAT obtained by students in the former Control group were then tabulated and statistically analyzed. To help insure that results would not be confounded by developmental differences, we analyzed only the scores of students who were tested at approximately the same time: Specifically, our analysis was based on students who were tested in November 1978, May 1979, Fall 1979, and Spring 1980. Correlated t-tests on gain scores were computed separately for the elementary level students who completed Level I of the test and secondary-level students who completed Level II. Results are presented in Table 12.

Table 11

PARENT QUESTIONNAIRE

Year 3 (N=373)

	YES	NO	NO RESPONSE
1) Please indicate whether you have been given more information concerning your child's educational status this school year than in previous years for each of the following:			
a) Your child's skill level.	84.45	13.67	1.88
b) Your child's progress since last grading period.	80.70	17.43	1.88
c) Your child's progress since the beginning of the year.	87 94	11.26	2.14

	VERY SATISFIED	SATISFIED	UNDECIDED	DISSATISFIED	VERY DISSATISFIED	NO RESPONSE
2) Please indicate how satisfied you are with the format of the following areas on your child's Performance Report Form by circling the response which best describes how you feel.						
a) Your child's skill level.	29.22	57.37	9.38	3.75	0	.27
b) Your child's progress since last grading period.	34.58	53.89	5.63	5.63	0	.27

	YES	NO	NO RESPONSE
3) Are you satisfied with the number of times you received your child's Performance Report Forms?	90.08	7.77	2.15

	TWICE	AT THE END OF THE YEAR	OTHER	NOT APPLICABLE
If no, how often do you wish to receive a copy of your child's report?	63.4	12.2	24.4	(N=332)

4) Please indicate your degree of understanding of each of the following by circling the response which best describes how you feel.	VERY EASY	EASY	UNCERTAIN	DIFFICULT	VERY DIFFICULT	NO RESPONSE
a) Performance codes.	29.49	54.69	10.19	2.14	.27	3.22
b) Description of the goals-	28.95	54.42	11.80	1.07	0	3.75
c) Description of the skills.	29.76	55.23	10.19	1.61	0	3.22

TABLE 12

Correlated t-tests on WRAT Gain Scores
Former Control Group Students (Year 2 and 3)

		Year II Gain		Year III Gain		Difference		
	N	X	S.D.	X	S.D.	X	S.D.	t*
Elementary Level								
Reading	27	5.26	4.18	5.85	3.34	.59	4.53	.68
Math	27	4.15	3.60	2.44	3.37	-1.70	5.01	-1.77
Secondary Level								
Reading	21	5.38	12.48	6.81	5.54	1.43	12.99	.50
Math	20	3.95	2.46	2.75	2.77	-1.20	3.22	-1.67

*all probabilities exceed .05

As the data in this table show, there were no statistically significant differences in the raw scores WRAT gains across the two project years. Several factors make it wise to treat these data cautiously. First, measuring the academic achievement of LD students is problematic due to the great fluctuation in their learning styles and rates of skill aquisition. Consequently, standardized assessment instruments such as the WRAT may not be entirely appropriate for this population. Second, incomplete data and the small sample size (owing to student attrition and variability in dates of testing across classrooms) make it difficult to draw general conclusions. At best, these results suggest that the academic progress of participating students was not adversely affected by the program.

Summary and Evaluation Results

Results from the third year evaluation were, for the most part, supportive of the project's objectives. To summarize, evaluation data indicated that:

- Teachers were able to write a larger number of instructional objectives per student as a result of program participation. This increase was most apparent in elementary-level classrooms.
- Teachers in IIIP classrooms were able to update a larger number of instructional objectives over the course of the academic year. The average number of updated objectives increased significantly in both elementary and secondary-level classrooms.
- Teachers were able to save approximately 20 minutes preparing IEP's. No significant reduction in the time required to update IEP's was evidenced. Teachers also indicated that as a result of the program, they were able to prepare IEP's more efficiently.
- Teachers indicated that they had become somewhat more familiar with new and/or different instructional resources during the current school year. However, there were no reported changes in their use of new resources.
- Computer-generated III Program records were found to correspond quite closely with teacher maintained records.
- The records and reports produced for the III Program were rated by teachers as helpful and complete.
- Ratings of the quality of the IEP's written by participating teachers in the third project year did not indicate that any improvements occurred. However, lack of reliability across raters and time frames makes suspect the validity of these data.

- Parents seemed quite satisfied with the types and frequency of information they received from the project about the educational status and progress of their children.
- Student performance on the reading and math subtests of the WRAT showed no significant differences in raw score gains across project years. The most reasonable conclusion that can be drawn is that student academic achievement was not affected -- either negatively or positively -- by the project. Overall, evaluation data suggest that the chief project intent, namely to assist and better equip teachers improve individualized instruction, was adequately achieved.

Data Regarding Pupil Population

In the AIU, the number of LD students being served is currently ± 2,400. The age ranges are 5 through 18 years in grades kindergarten through twelve.

During the second year pilot phase, approximately 263 students and 24 teachers (treatment and control) had been served.

In the third year implementation phase of the project, all students within the LD program were served by the Child Service Demonstration Center. All LD teachers, presently 154 in number, were trained.

The AIU, Learning Disabilities Program has no statistics available on the estimated length of time pupils spend in the program.

Plans for Continuation

The Allegheny Intermediate Unit has made the decision to continue the operations of the computer system and all aspects of program delivery for the 1980-81 school year. In addition, two other exceptionalities will be piloting the computer program for their teachers and students in the educable mentally retarded and physically handicapped programs. If the program proves to be successful and if funds allow, the program will continue to be expanded into other exceptional areas in the future. Additionally, two school districts within Allegheny County are interested in piloting this individual instructional program with students in a regular education setting for the 1980-81 school year.

Product Development

Listed below are several products now available upon request. For a detailed description of each, see the section "Computer Form Development":

1. Master list of suggested resource materials linked to specific skills.
2. All computer forms which have been developed.

3. All evaluation instruments which have been developed (see the section "Evaluation Instrument Development").

4. Mastery tests to assess the reading and math skills identified on the LD checklist at the primary, intermediate or secondary levels.

5. Total computer program package is available for agencies having the capabilities and resources to replicate this system.

Contact Information

For further information on the developments of the Improved Individual Instruction Program, please contact:

Ms. Barbara Minick, Project Director
Improved Individual Instruction Program
Allegheny Intermediate Unit
Suite 1300, Two Allegheny Center
Pittsburgh, PA 15212
(412) 323-5834

APPENDIX A

Association for the Development of Computer-Based Instructional Systems
1980

A COMPUTER MANAGED INSTRUCTIONAL PROGRAM FOR TEACHERS OF LEARNING DISABLED STUDENTS

Dr. Melvin Samuels AIU

Ms. Barbara Minick AIU

ABSTRACT

The Allegheny Intermediate Unit has developed a computer based resource information system for learning disability teachers. The system provides teachers with lists of teaching techniques and instructional materials that are appropriate for individual student's needs. In addition to the descriptive listing, the printouts also identify the location of the material and designate other students in the same class for which the material would be appropriate. Teachers feed basic assessment information and updated records on each student into the data bank, and the computer matches this information with lists of materials and techniques that were programed prior to the school year. Based on initial assessment information, the computer is able to generate a portion of a student's Individual Education Plan (IEP). An additional feature of the system is its capability to produce individual progress reports four to six times a year. These reports are matched directly to the IEP. Parents, administrators, and project staff provide continuous input through an advisory council structure.

Prescribing individual instruction for special education students has become a very time-consuming concern of educators. The Improved Individual Instruction Program (I.I.I.P.) is an outgrowth of this concern and was developed as a means of providing a more efficient and accountable system of individualized instruction. The I.I.I. Program is a federally-funded project under Title IV-G which services learning-disabled (L.D.) students within the Allegheny Intermediate Unit, Exceptional Children's Program, Pittsburgh, Pennsylvania. The Exceptional Children's Program services 13,000 children, grades K-12, in the 46 suburban school districts in Allegheny County. Approximately 2,400 of these children are diagnosed as learning disabled.

The I.I.I. Program is a computer managed instruction program (CMI), maintained on a Hewlett-Packard 3000, Series II computer, which provides teachers with lists of teaching techniques and instructional materials that are appropriate for individual students' needs based on performance data maintained in the computer.

An outgrowth of the initial assessment information provided by the teacher for each child is a computer-generated portion of an IEP. Paralleling the IEP is a progress report which is generated for use during parent/teacher conferences.

RATIONALE FOR THE PROJECT

In the 60's, the Association for Children with Learning Disabilities (ACLD) first identified the problems of L.D. students. Allegheny County responded to this need by opening two of the first learning disabilities classrooms in the country. Since this time the program has mushroomed each year until it has reached its present number of 150 classrooms. The demand from parents and administrators to open many more L.D. classrooms has been a constant one. The L.D. program has received a lot of support and positive publicity resulting in a "label" which is not stigmatizing to parents or students.

In the early 70's, service was expanded to include secondary classes. Comprehensive perceptual, reading, math and language skills checklists were developed to offer intensive individualization and remediation. The curriculum has used a task-analysis skill approach with strong emphasis on academics. Assessments were developed to correspond to each skill on the checklists. From the diagnostic information on the skills checklists, a prescription (forerunner of the Individualized Education Program - I.E.P.) was developed. Teachers would then match appropriate teaching materials and techniques to the prescribed skills.

Since the major thrust of the program is on an individual skill analysis, the amount of paper work and recordkeeping is very time-consuming. As pupil population doubled and tripled, economics forced teacher numbers to remain constant. This caused the burden of paperwork and recordkeeping as well as "teaching load" to become overwhelming for teachers. The concept of a computerized resource retrieval system and tracking program was considered in an effort to lessen the paperwork, yet increase teacher efficiency and accountability.

COMPUTER MODEL DEVELOPMENT

Other computer retrieval systems were studied for their effectiveness. CMI models were operating in Ohio, South Dakota, Kentucky and Florida. Two systems specifically studied - Skiltrac, Center for Educational Innovation, Columbus, Ohio and the Child Based Information System, Central Susquehanna Intermediate Unit, Lewisburg, Pennsylvania, offered resource information and reporting systems but did not cover the range or level of academic skills needed for elementary and secondary grades.

Objectives and needs for a system designed specifically for an academic curriculum in grades K-12 were established by L.D. staff. Mr. Russell Guthrie, former Computer Services Director for the Central Susquehanna Intermediate Unit assisted in the Systems Analysis design for the model.

From the systems already in use, the following strengths were incorporated:

1. The use of efficiency grouping data.
2. The use of a "reminder" loop if skills have not been mastered.
3. The review and use of already developed teacher in-service training models.
4. The use of the logic and design of other computer program.

Of the weaknesses identified in other systems, the I.I.I. Program attempted to remedy two major ones:

1. Data entry problems.
2. Turnaround time for teacher receipt of information.

Features which are incorporated in the I.I.I. Program are:

1. The program allows for a wide range of teacher choice and involvement in the design and programming process.
2. The program provides the location of materials suggested for use.
3. The program provides evaluation data on materials and techniques used by teachers.
4. The program allows for teacher selection and incorporation of techniques and analysis of materials.
5. The program has been field-tested for two years.
6. The program provides for efficient ordering of instructional materials by tracking most-used and most-effective resources.
7. The program provides a student-tracking component which can generate a portion of a student's IEP as well as periodic performance updates.

Attachment A is a graphic overview of the I.I.I. Program.

OBJECTIVES OF THE PROJECT

The purpose of the Improved Individual Instruction Program is to design an individually prescribed system which will aid classroom L.D. teachers in developing and updating IEP prescriptions and techniques, maintain complete student records and evaluate the effectiveness of the materials and techniques used.

The project has three primary goals:

1. The systems will result in increased teacher efficiency and proficiency.
2. The program will enable supervisors to work more closely with teachers by providing a better understanding of what has occurred in those classrooms.
3. The program will result in greater parent information and satisfaction.

FUNDING AND OVERVIEW OF SYSTEM

The original proposal was submitted to the Bureau of Education for the Handicapped in December of 1976. Funds were received under Title VI-G to begin program operations in July, 1977.

The operations of the computer system begin immediately after initial assessment is done on the student in the L.D. classrooms.

Academic strengths and weaknesses are coded for each student and teachers prioritize those weak skills which will receive instruction during each grading period. The resource information bank then generates a list of suggested resource materials and strategies that are appropriate for individual student's needs. All suggested materials are readily available to the teacher in his/her classroom or through the Western Pennsylvania Special Education Regional Resource Center. In addition to these sources, teachers may also borrow selected materials from the I.I.I. Program Resource Center which has been specifically designed as a lending service. The I.I.I. Program is based on the conviction that teacher judgment is the most valuable aspect of the program. From the suggested list of resources, teachers choose those materials which would be most effective with individual students. This belief assures that the computer does not become the "prescription writer" and will allow teachers to address both the individual student's learning style and the individual teacher's teaching style.

In addition to the descriptive listing of resource materials and their locations, information is provided indicating the publisher, page number, level and whether the resource is a priority or supplementary item. Priority is defined as material that is available in most L. D. classrooms. Supplementary is used to designate new items or materials not readily accessible to teachers. This category is helpful for the experienced teacher who has used most of the items in his/her room and is looking for new material. It is also useful to the beginning teacher who is not yet familiar with the content of all the material in the classroom. An additional feature of the teaching program allows the computer system to identify other students in the class working at the same skill level for grouping purposes. Attachment B is a sample printout of suggested resource materials and student groupings.

Another aspect of the computer system involves recordkeeping and accountability. A portion of an IEP can be generated from the initial assessment information given by the teacher. This portion does not represent a complete IEP but merely identifies certain basic demographic data and skill areas needing remediation during the current year. Teachers must still identify additional academic and perceptual areas and must determine success criteria in every instance. Refer to Attachment C for a sample computer-generated portion of an IEP. Note that it contains an annual goal and short term objectives as well as evaluation procedures.

The system has the capability of pr ducing individual student performance reports four to six times a year. Teacher administer mastery tests for skills remediated. This information is stored in t data bank and student reports are periodically updated throughout the year. Refer to Attachment D for a sample Performance Report Form. Note that the report form parallels the objectives on the IEP and contains a more detailed listing of skills matched to periodic performance u dates.

EVALUATION TO DATE

Following the field-testing phase i volving four teachers in L.D. classrooms during the first year, the computerized resource system was extended during the second year to 12 L.D. classrooms.

The listing of suggested resources, grouping of students with similar skill weaknesses and mastery tests are feature which were suggested by the teachers during pilot phases. The biggest bonus however, seems to be the ease and time save in doing IEP's and in recordkeeping.

Attachments E and F indicate teache and parent reaction to the computer-generated portions of the IEP.

Other evaluation instruments which have been developed and are being utiliz include an assessment of on-going project operations as seen by teachers and supervisors; evaluation of resources in the data bank for effectiveness, appropriateness and future ordering purposes; teacher knowledge of resource materials; quantity and quality of skill information on the IEP; teacher/parent/supervisor information reports; and math/reading achievement score information for students in project classes.

It is still too early to have definite results on any of these areas but findings do seem to indicate:

1. IEP development time is markedly reduced when using the computer program.
2. Teachers are conscientiously evaluating resources as to their appropriateness and suggesting novel materials fo coding in the system.
3. Teachers are becoming more knowledgeable about a wider range of resource materials.
4. Teachers, parents, and supervisors are indicating that they receive mor detailed information on skill performance for project students.

5. Overall computer operations seem to be running smoothly with turnaround time between classroom and computer averaging a week in length.

CURRENT STATUS OF PROJECT

During the 1979-1980 school year the program is being fully implemented and will serve 150 teachers and 2,400 L.D. students. Due to the nature of the data the decision has been made to input student information via NCS optical scan forms.

Efforts are being made this year to collect information on student performance, however, it becomes difficult to attribute student change information to a CMI program.

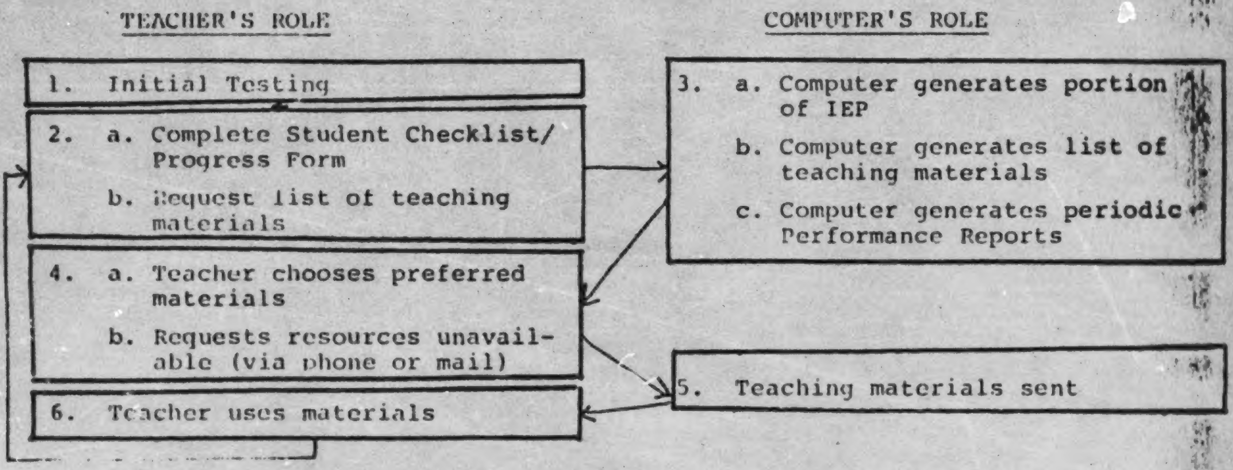
FUTURE PLANS

A real bonus for the program is its generalizability. It can easily be adapted to other exceptionalities as well as to the regular classroom because it is based on academic hierarchy in reading and mathematics. This may make it especially beneficial to regular classroom teachers trying to adapt programs for mainstreamed students.

In the future, the Allegheny Intermediate Unit is looking at the possibility of adding the Educable Mentally Retarded and the Learning Adjustment Programs to the computerized system. It may also be possible to service multiply-handicapped resource rooms and some mainstreamed students in district classrooms.

Attachment A

FLOWCHART OF IMPROVED INDIVIDUAL INSTRUCTION PROGRAM OPERATIONS


TEACHER'S ROLE
COMPUTER'S ROLE
1. Initial Testing
2. a. Complete Student Checklist/ Progress Form
b. Request list of teaching materials
3. a. Computer generates portion of IEP
b. Computer generates list of teaching materials
c. Computer generates periodic Performance Reports
4. a. Teacher chooses preferred materials
b. Requests resources unavailable (via phone or mail)
5. Teaching materials sent
6. Teacher uses materials

OPERATIONS IN STEP-BY-STEP FORM

1. Teacher does Reading and Math Assessment on student.

2. Teacher completes Student Checklist and Progress Form; makes requests for resource materials. Sends information to I.I.I.P. Center.

3. a. From Initial Assessment information, the computer generates a portion of an IEP.

   b. From information on Student Checklist and Progress Form, the computer generates a list of suggested resource materials. This list is sent to the teacher.

   c. The computer generates a Performance Report Form.

4. From the computer list, the teacher chooses those materials he/she prefers to use. If the material is unavailable to the teacher, he/she contacts the I.I.I.P. Center.

5. The I.I.I.P. Center sends the required resources.

6. Teacher uses the teaching materials.

   Next the teacher may:.

   a. Request further resources for the same skills.
   b. Request a Mastery Test if remediation has been successful.
   c. Request resources for new skills.

   At the close of each marking period, the teacher may submit the Student Checklist and Progress Form to the I.I.I.P. Center with the student's progress marked for each strand/skill number appropriate. The teacher also indicates new strand/skills for which he/she requests resources. And the process begins again at Step 2.

Attachment B

```
                              ****************************************
                                     ALLEGHENY INTERMEDIATE UNIT
                                    EXCEPTIONAL CHILDREN'S PROGRAM
                                IMPROVED INDIVIDUAL INSTRUCTION PROGRAM
                              ****************************************
                                          WED, JAN 23, 1980
                                SUGGESTED RESOURCE LIST FOR SUE WHITE


-----------
TRAND #002     STRUCTURAL ANALYSIS SKILLS
KILL  #035     SELECTS/USES CORRECT PUNCTUATION "."
-----------

TUDENTS WORKING ON THIS STRAND & SKILL:

   00195   GEORGE WASHINGTON

RESOURCE #1
(00282)                PRIORITY-YES         LEVEL: PRIMARY-YES              LOCATION: CLASSROOM-YES   MASTER TEACHER-NO
                       SUPPLEMENTARY-NO            INTERMEDIATE-YES                   REACH R.C.-YES  IIIP LIBRARY-YES
  PUBLISHER--BARNELL LOFT, LTD.                    SECONDARY-YES
  RESOURCE INFORMATION--CAPITALIZATION AND PUNCTUATION, BOOK A, UNIT 7 (1972), REACH #50-039

RESOURCE #2
(00283)                PRIORITY-YES         LEVEL: PRIMARY-YES              LOCATION: CLASSROOM-YES   MASTER TEACHER-NO
                       SUPPLEMENTARY-NO            INTERMEDIATE-YES                   REACH R.C.-YES  IIIP LIBRARY-YES
  PUBLISHER--BARNELL LOFT, LTD.                    SECONDARY-YES
  RESOURCE INFORMATION--CAPITALIZATION AND PUNCTUATION, BOOK B, UNIT 7 (1972), REACH #50-040

RESOURCE #3
(00284)                PRIORITY-YES         LEVEL: PRIMARY-YES              LOCATION: CLASSROOM-YES   MASTER TEACHER-NO
                       SUPPLEMENTARY-NO            INTERMEDIATE-YES                   REACH R.C.-YES  IIIP LIBRARY-YES
  PUBLISHER--BARNELL LOFT, LTD.                    SECONDARY-YES
  RESOURCE INFORMATION--CAPITALIZATION AND PUNCTUATION, BOOK C, UNIT 7 (1972) REACH #50-040-01

RESOURCE #4
(00285)                PRIORITY-YES         LEVEL: PRIMARY-NO               LOCATION: CLASSROOM-YES   MASTER TEACHER-NO
                       SUPPLEMENTARY-NO            INTERMEDIATE-YES                   REACH R.C.-YES  IIIP LIBRARY-YES
  PUBLISHER--STECK-VAUGHN CO.                      SECONDARY-YES
  RESOURCE INFORMATION--LANGUAGE EXERCISES, SILVER BOOK, 1973,  PP. 7, 9, 10, 15, 35, 93-96, 33, 25
```

INDIVIDUALIZED EDUCATION PROGRAM

GENERAL DATA

STUDENT - BROWN, CHARLIE PHONE - 777-0234

PARENT, GUARDIAN, OR OTHER ____________________

ADDRESS ____________________

ATTEMPTS AND RESULTS OF PARENTAL CONTACT(S)

PLEASE INDICATE WHEN AND WHAT TYPE OF PARENTAL NOTIFICATION WAS UTILIZED TO INVITE PARENTS TO ATTEND THE IEP CONFERENCE AND THEN INDICATE WHAT THE PARENT RESPONSE WAS TO EACH NOTIFICATION. PERSON(S) RESPONSIBLE FOR NOTIFICATIONS SHOULD INITIAL APPROPRIATE BOXES.

NOTIFICATIONS	DATE	LETTER	PHONE	HOME/SCHOOL VISIT	PARENTAL RESPONSE
FIRST					
SECOND					
THIRD					

IEP PLANNING TEAM

THE FOLLOWING PERSONS HAVE PARTICIPATED IN THE INDIVIDUALIZED EDUCATION PROGRAM PLANNING CONFERENCE:

NAME	TITLE
GEORGE WASHINGTON	L.D. TEACHER

SCHEDULE

DATE OF IEP CONFERENCE ____________________

DATE(S) OF ANNUAL REVIEW ---- 09/09/79

INDIVIDUALIZED EDUCATION PROGRAM

GENERAL DATA:

STUDENT: BROWN, CHARLIE   BIRTHDATE: 02/02/65   PHONE: 777-0234

PRIVATE SCHOOL ________

SCHOOL DISTRICT: BABCOCK   BUILDING: PINE JR. HIGH

REGULAR EDUCATION PARTICIPATION: THE STUDENT WILL, AT THIS TIME, PARTICIPATE IN REGULAR EDUCATION: ALL ( ), MOST ( ), PART ( ), OR NONE ( ) OF THE TIME AT THE _____ GRADE.

SPECIAL EDUCATION ASSIGNMENT(S):	PROJECTED DATES BEGINNING	 ENDING	SPECIAL MEDIA/MATERIALS
LEARNING DISABILITY ________	04/05/72	ONGOING	________
________	________	________	________
________	________	________	________

RELATED SERVICES:

TRANSPORTATION ________	________	________	________
PHYSICAL EDUCATION REGULAR ( ) ADAPTIVE( )	________	________	________
________	________	________	________
________	________	________	________

PRESENT EDUCATION LEVELS

WIDE RANGE ACHIEVEMENT TEST SCORES:

READING WORD RECOGNITION: 06.03 GRADE LEVEL (04/79)

SPELLING: 08.02 GRADE LEVEL (04/79)

ARITHMETIC: 06.03 GRADE LEVEL (04/79)

PAGE 3.2

COMPUTER GENERATED PORTION - IEP   STUDENT: BROWN, CHARLIE   SCHOOL YEAR: 1979/1980

INSTRUCTIONAL AREA: MATH
ANNUAL GOAL: NUMBER SEQUENCING SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROD/COND	SUCCESS CRITERIA	PROGRESS
RECOGNIZES/COMPLETES NUMBER PATTERNS	APPROP. MASTERY TEST 102/007-102/010	TEACHER EVALUATION: AT _______ ACCURACY:	
COPIES/ORGANIZES NUMBERS CORRECTLY	APPROP. MASTERY TEST 102/011-102/020	TEACHER EVALUATION: AT _______ ACCURACY:	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT _______ ACCURACY:	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT _______ ACCURACY:	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT _______ ACCURACY:	

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: PHONIC ANALYSIS SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROD/COND	SUCCESS CRITERIA	PROGRESS
IDENTIFIES IRREGULAR VOWEL COMBINATIONS	APPROP. MASTERY TEST 001/163-001/170	TEACHER EVALUATION: AT _______ ACCURACY:	
IDENTIFIES IRREGULAR PHONETIC PARTS	APPROP. MASTERY TEST 001/171-001/177	TEACHER EVALUATION: AT _______ ACCURACY:	
IDENTIFIES DIPHTHONGS	APPROP. MASTERY TEST 001/182-001/190	TEACHER EVALUATION: AT _______ ACCURACY:	
IDENTIFIES SILENT LETTERS B, G, K	APPROP. MASTERY TEST 001/191-001/193	TEACHER EVALUATION: AT _______ ACCURACY:	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT _______ ACCURACY:	

Attachment D

****

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

****

PERFORMANCE REPORT FORM

STUDENT: BROWN, CHARLIE
TEACHER: GEORGE WASHINGTON
SCHOOL: PINE JR. HIGH
SCHOOL TERM: 1979/1980
DATE: AUG. 24, 1979

RECORD OF ATTENDANCE
1ST PERIOD ____________
2ND PERIOD ____________
3RD PERIOD ____________
4TH PERIOD ____________
5TH PERIOD ____________
6TH PERIOD ____________

PERFORMANCE CODES

- M--MASTERY OF SKILL. NO FURTHER GRADES WILL BE GIVEN FOR THIS SKILL.
- P--PROGRESS HAS BEEN MADE ON SKILL.
- N--NEEDS REMEDIATION
- S--STUDENT HAS REACHED FRUSTRATION LEVEL. INSTRUCTION WILL BE STOPPED TEMPORARILY AND RESUMED AT A LATER DATE.
- R--STUDENT HAS REGRESSED FROM PREVIOUS PERFORMANCE LEVEL. INSTRUCTION MUST BE RESUMED.

LISTED BELOW ARE THE MAJOR GOALS AND SKILLS WITH WHICH THIS STUDENT HAS BEEN WORKING:

	MASTERY SCORE	RATING PERIODS 1	2	3	4	5	6
MAJOR GOAL: 102-NUMBER SEQUENCING SKILLS							
SKILL:							
008-RECOG/COMPLETE NUMBER PATTERN-FRWD ODD	100%	P	M				
009-RECOG/COMPLETE NUMBER PATTERN-BDWRD EVEN		P	M				
MAJOR GOAL: 103-MATHEMATIC PROCESSES							
SKILL:							
004-ADDITION-ASSOCIATIVE CONCEPT		P	R				
005-ADDITION-COMMUTATIVE CONCEPT		N	S				
MAJOR GOAL: 104-FRACTION SKILLS							
SKILL:							
001-RECOGNIZES AND NAMES FRACTION: ONE HALF	80%	P	M				
002-RECOGNIZES AND NAMES FRACTION: ONE THIRD	100%	P	M				

Attachment E

EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

TEACHER EVALUATION OF COMPUTER GENERATED PORTION OF THE IEP

ITEM	N	%	N	%	N	%	N	%	N	%
	Excellent		Good		Fair		Poor			
1. My overall reaction to the Computer Generated Portion of the IEP is:	8	80.00	2	20.00	0		0			
	Yes		No		Don't Know					
2. Was time saved in doing the IEP because you used the Computer Generated form?	10	100.00	0		0					
	1/2 hr.		3/4 hr.		1 hr.		1-1/2 hr.		3 hr.	
If yes, estimate the amount of time saved per IEP.	2	25.00	2	25.00	1	12.50	2	25.00	1	12.50
	Yes		No		Don't Know					
3. Was there time saved by having the computer generate vital statistics already in the data base? (This is the information that appears on pages 1 and 2 of the IEP.)	10	100.00	0		0					
	Yes		No		Don't Know					
4. Was there time saved in having specific mastery tests listed for each skill on the IEP?	9	90.00	0		0					
	Very Clear		Clear		Hard to Understand					
5. How understandable is the format of the Computer Generated Portion of the IEP?	7	70.00	3	30.00	0					
	More Complete		Just As Complete		Not As Complete					
6. How complete do you feel the Computer Generated form is as compared to the handwritten IEP?	6	60.00	3	30.00	1	10.00				

ITEM	N	%	N	%	N	%	N	%	N	%
	Yes		No		Don't Know					
7. Does the Computer Generated Portion allow for adaptability if other skills need to be added to the IEP?	10	100.00	0		0					
	Very Efficient		Efficient		Uncertain		Inefficient		Very Inefficient	
8. How efficient is the Computer Generated Portion of the IEP?	7	70.00	3	30.00	0		0		0	
	Very Complete		Complete		Uncertain		Incomplete		Very Incomplete	
9. How complete is the Computer Generated Portion of the IEP in terms of adequately covering reading/math skills and evaluation conditions?	5	50.00	5	50.00	0		0		0	
	Yes		No		Don't Know					
10. Do you feel more instructional time was available because you used the Computer Generated form?	9	90.00	0		1	10.00				

Attachment F

EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

PARENT QUESTIONNAIRE ON THE COMPUTER GENERATED PORTION OF THE IEP

ITEM	N	%	N	%	N	%	N	%
	Excellent		Good		Fair		Poor	
1. My overall reaction to the Computer Generated Portion of the IEP is:	24	40.68	28	47.46	5	8.47	2	3.39
	Yes		No		Don't Know			
2. Is the Computer Generated Portion of the IEP easy to understand?	51	86.44	5	8.47	3	5.08		
	Yes		No		Don't Know			
3. Is more conference time with the teacher available to you because most of the objectives are already on the form?	51	86.44	0	0.00	8	13.56		
	A Lot		Some		A Little		None	
4. How much time do you feel the Computer Generated Portion of the IEP saves for the teacher?	53	89.83	5	8.47	1	1.69	0	0.00
	More Complete		Just As Complete		Not As Complete			
5. How complete are the skills on the Computer Generated Portion of the IEP as compared to the handwritten IEP?	17	28.81	40	67.80	2	3.39		
	Yes		No		Don't Know			
6. Does the Computer Generated Portion allow for adaptability if other skills need to be added to the IEP?	56	94.92	1	1.69	2	3.39		

In-Service Insights

★ Art and Language Arts, an in-service credit course for teachers responsible for the artistic and/or language development of elementary children, will be given mornings at the AIU June 18-22. Instructor is Sara Tambucci. Call 323-5758.

★ A new course, The Autistic and Autistic-like Person, is offered by the Graduate School of Education, Duquesne University, mornings from June 25 to July 27. Instructor Margie Van Wert teaches the historical, psychological, medical and educational aspects of autism, emphasizing the development of instructional procedures through diagnosis, planning and evaluation. Call: 434-6091/6092.

★ Least Restrictive Environment - Who, What, When, Where, Whose and Why? a two-credit in-service course taught by IEP coordinator for the AIU, Dennis Barrett, will be given July 16-20, 8:30 a.m. to 3:30 p.m. at the AIU. The course will provide an overview of awareness of the concept of LRE and procedural safeguards statewide and locally. Regular education, vocational assessments and IEP development will be emphasized. Call: 323-5758.

★ Developing Programs for the Gifted and Talented in the Regular or Special Classroom (K-12) will be taught by the AIU's Gifted and Talented Program supervisor Ken Chuska and staff at the AIU, August 14-16, 9 a.m. - 3 p.m. Participants' work can be used for both special and regular classes for the gifted and talented. Call: 323-5758.

★ So, What's A Parent Supposed to Do? is a series of study groups for parents sponsored by the Consultation and Education Unit of the South Hills Health System. New and continuing groups are formed around such topics as: You and Your Young Child, and Helping Your Handicapped Child Grow. Individual consultations are also offered. Contact Kathy Coleman, parent program coordinator, at: 469-3112.

★ Elaine Brown, professor of speech and language pathology from Northwestern University, spoke May 4 to all AIU itinerant and non-public school speech and language clinicians on the selection process for children needing speech therapy. The in-service, dealing with mainstreaming techniques, was jointly sponsored by the ECP and the Individual Education Program (IEP) Project.

★ Serving mathematically and scientifically talented students was the focus of a workshop for teachers and administrators, held May 1 at the University of Pittsburgh's Learning Research and Development Center (LRDC). It was co-sponsored by LRDC and the AIU.

★ Ideas for speech and language programming that emphasize the use of Total Communication with mentally retarded children were exchanged by the special centers speech and language staff April 27.

SUMMER ARTexpress

In honor of the International Year of the Child, ARTexpress summer workshops for children in the Museum of Art, Carnegie Institute, will focus on French, Chinese and African cultures. Children will also explore the museum and see what different people from all over the world have created. Those ages 4-10 yrs. may sign up for weekly sessions in the Children's Room, July 10—Aug. 3, Tuesdays through Fridays, from 10:30 a.m. to 12 noon. Cost per week: $12 members; $15 non-members. For information, call Bay Judson at 622-3214.

INSIDE LOOK AT SOCIAL WORKERS, GATE

A glimpse of the world of AIU social workers as they crisscross the county was seen at the Inside Look Luncheon on March 23. The program, planned for AIU staff by ECP social workers Kathy Mastantuono, Dolores Clarke, Shirley Kirchner, Nancy Hess and Pat Bakich, and Pupil Personnel social workers Sandy Swetland and Nancy Calhoun, was highlighted by a slide show which the team produced with the help of Rob Dillon, AIU photographer, and Donna Mihalik, scriptwriter. A child abuse policy developed by the social workers which now serves as a model for local school districts, was also spotlighted.

The Gifted and Talented Enrichment Program (GATE) was featured at the May 1 luncheon. GATE supervisor Ken Chuska told how the program is structured around the different needs, interests and abilities of academically gifted elemntary and secondary children. Curriculum specialist Herbert Morgan presented a new slide show that covers GATE projects since its beginning in 1974, and curriculum specialists Judith Cunningham, Linda Miller and Andrea Williams discussed the GATE Resource Center, in-services and publications developed by the staff. The AIU is marking the International Year of the Child with this spring series of luncheons.

THREE-WAY COMPARISON — Parent Marlene Moore (left), Claire Sachnoff, AIU learning disabilities teacher for Turtle Creek Area School District, (center) and Deverah Routman district administrative assistant, (right), share the new Performance Report Form during a 1978-1979 IEP Conference. This form, part of the computer based information resource system for LD teachers, lists the major goals and skills with which a child has been working. The I.I.I.P system, a pilot project this year, is designed to produce individual progress reports on students four to six times a year.

CEC ERIC's NEWSFRONT

Computer based information resource system

With the support of a federal grant, the Allegheny Intermediate Unit is continuing development of a computer based information resource system for learning disability teachers. The system provides teachers with lists of teaching techniques and instructional materials that are appropriate for individual student's needs. In addition to the descriptive listing, the printouts also identify the location of the material and designate other students in the same class the material would be appropriate for. Teachers feed basic assessment information and updated records on each student into the data bank, and the computer matches this information with lists of materials and techniques that were programed prior to the school year. An additional feature of the system is its capability to produce individual progress reports four to six times a year. Parents, administrators, and project staff provide continuous input through an advisory council structure.

For additional information, contact Ms. Bonnie Minick, Allegheny Intermediate Unit, 2 Allegheny Center, Pittsburgh PA 15212, 412/323-5834.

Fight "handicapism" in children's books

In a special issue of *Interracial Books for Children Bulletin*, the portrayal of disabled people is analyzed and common stereotypes are identified. *Bulletin* staff worked with disability activists to develop ways in which writers, editors, parents, librarians, and other concerned individuals can counteract biases toward handicapped persons. This issue presents some classroom strategies to assist teachers in developing student awareness of handicapism and its relation to other forms of oppression.

Also presented are some facts and figures about disabled people in the United States. In an open letter, a disability rights activist states, "Children should be made aware of the fact that we are *not* fragile. We won't break if we get bumped - in fact we are strong and tough from surviving in a hostile world all our lives. Disabled people should be pictured as active, capable, physically strong, emotionally strong, able to run their own lives, sexual, etc."

Order *Interracial Books for Children Bulletin*, Volume 8, Numbers 6 and 7, special double issue on Handicapism in Children's Books from Council for Interracial Books for Children, 1841 Broadway, New York NY 10023. Price: $3.00.

The Newsfront column is a project of the ERIC Clearinghouse on the Handicapped and Gifted, funded by the National Institute of Education.

What's So Special About Special Ed?

Fall, 1977, Allegheny Intermediate Unit, Pittsburgh, Pennsylvania

The Learning Disabilities Program (LD) is developing the Improved Individual Instruction Program (IIIP), a $107,000 federally funded project designed to help teachers develop and update individual education programs (IEPs). A computer retrieval system will give teachers access to appropriate resource materials and techniques. The teachers will then evaluate their effectiveness within their own classrooms. Diagnostic teaching, formal and informal reassessment of the child's progress, and frequent updating of the initial prescription will occur every two to three weeks. Because of the great number of IEPs to be written and updated over a shortened time, the computer retrieval system is being designed to increase teacher efficiency, provide parents, teachers and supervisors with a better understanding of what happens in the classroom, and show any gains in math and reading in the project's initial four classrooms. Barbara Minick is IIIP Project director. Dr. Beverly School supervises Learning Disability classes.

PRISE Reporter

No. 9, October 1977, Pennsylvania Resources and Information Center for Special Education, 1013 West Ninth Avenue, King of Prussia, Pennsylvania 19406

Computer-based Instructional Information at IU No. 3

With the support of a federal grant, the Allegheny Intermediate Unit is continuing development of a computer-based information resource system for LD teachers. The system provides teachers with lists of teaching techniques and instructional materials which are appropriate for individual student's needs. In addition to the descriptive listing, the printouts also identify the location of the material and designate other students in the same class the material would be appropriate for. Teachers feed basic assessment information and updated records on each student into the data bank, and the computer matches this information with lists of materials and techniques which were programmed prior to the school year. An additional feature of the system is its capability to produce individual progress reports four to six times a year. For additional information contact: Ms. Bonnie Minick, Allegheny Intermediate Unit, 2 Allegheny Center, Pittsburgh, PA 15212. Telephone: 412/323-5819.

about
special ed

whats SO SPECIAL

Summer, 1978

Allegheny Intermediate Unit Pittsburgh, PA.

Computer Program Switches On

The new computer retrieval system for the Learning Disabilities Program is field testing individual instruction for two classes this summer. Each pilot LD class of 10 students, 6-13 years of age, housed temporarily at Western Hills and Middle Road Schools, will continue development of the computer-based information resource system for LD teachers, known as the Improved Individual Instruction Program (IIIP). IIIP is a federally funded project which helps teachers develop and update individual education programs, or IEPs, and is directed by Barbara Minick. The program began in four LD classes in April before the computer was in operation.

The information resource system provides teachers with lists of teaching techniques and instructional materials related to specific skills in reading and math. In addition to the descriptive list of materials, the print-out will include the instructional level and location of each material.

Another aspect of the project is that it can issue periodic progress reports on individual students. The computer list will then indicate students who demonstrate similar academic weaknesses, so teachers can group them accordingly.

Individualized instruction is based upon the computer-generated list of suggested resource materials. From the findings of the summer field tests, changes in the computer program will be made before fall classes begin.

Summer Field-Testing Phase of the Computer-Based Resource System

With the support of a federal grant, the Allegheny Intermediate Unit Learning Disabilities Program is continuing development of a computer-based information resource system for LD teachers. The system provides teachers with lists of teaching techniques and instructional materials related to specific skills in reading and math. In addition to the descriptive list of materials, the print-out will include the instructional level and location of each material.

Another aspect of the project concerns the capability of generating periodic progress reports on individual students. Further, the computer list will indicate those students demonstrating similar academic weaknesses for instructional grouping purposes.

This summer, the Improved Individual Instruction Program will be conducting a field-testing phase on the operations of the computerized system. Two learning disability teachers, , will instruct a class of approximately 10 students each. The students will range in age from 6 to 13 years and the 2 classes will be located at Western Hills School in Moon Township and Middle Road School, Allison Park.

Individualized instruction will be based upon the computer-generated list of suggested resource materials. From the findings of the summer field-testing phase, revisions and changes in the computer program will be made prior to the start of the school year in the fall.

North Hills

A-6 — TUESDAY, JULY 25, 1978 — NEWS RECORD

Computing fractions

North Hills News Record

Mary Ellen Wulf watches as one of the children in the summer classes at Middle Road School learns more about fractions with the help of a computerized resource bank. The students receive individually prescribed instructions. This is one of two summer classes held to field-test the effectiveness of computer-based resouce systems with the Allegheny Intermediate Unit. Barbara Minick and Beverly School also are staff members on the program.

REACH NEWSLETTER

WESTERN PENNSYLVANIA SPECIAL EDUCATION
REGIONAL RESOURCE CENTER

83

JAN.-FEB., 1978

Computer Assists Teachers in Identifying Material

"I have a student who needs additional work with initial consonant b. I wonder what instructional materials I can use." Teachers face situations similar to this every day. It doesn't take long to realize that assessing a student's weaknesses is only the first step in dealing with the problem. A larger and even more time-consuming task involves finding materials to help remediate the weakness. Teachers of learning disabled students in the Allegheny Intermediate Unit will soon have the help of a computer to identify and locate appropriate materials.

With the support of a three-year federal grant, the LD program is developing a computer-based information resource system for teachers. Under the direction of Dr. Beverly School, learning disability program supervisor, and Ruth White, coordinator of federal programs, the project, which was started in September, is being organized by Bonnie Minick.

Ms. Minick explains that the system is being designed to provide teachers with computer-generated lists of readily available instructional materials related to specific skills in reading and math. To date, over 5,000 materials in levels kindergarten through twelfth grade have been identified and categorized for the computer. Ms. Minick emphasizes that all doesn't really know the content of all the material in her room.

Once the appropriate materials have been identified, the next step involves the dissemination of the material to the teacher. Plans are to develop a resource library in attempts to "centralize the location of the core materials".

An additional aspect of the project is the capability of producing computer-generated individual student progress reports which can be designed into parent report forms. Ms. Minick explains that when each student is assessed on the checklists, the teacher will record the student's mastery or instructional need regarding each skill, and will periodically update this information to include what instructional techniques and materials have been used with each student. This information will be fed into the computer. The computer can then give the teacher a grouping of students who have the same weakness and indicate what materials and techniques have been used and with what effect. Ms. Minick points out that this feature will also be helpful to supervisors and for teachers getting a new child in her class.

In order to accommodate the magnitude of information, the project, in conjunction with the AIU, has leased a new computer system. The computer will

Ms. Minick notes that the parents have been very involved in the project. They have aided in the coding of materials and will possibly be involved in th distribution of materials to teachers.

Ms. Minick speculates that once th system has been established, it wil require a staff of people in order to ru efficiently. She estimates that a larg "chunk of time" will involve gathering materials and getting them to the teachers. She admits that there are som logistics that have not been worked out, but so far those involved in the projec feel that once the system is operatin efficiently, it will be of enormous benefi to teachers, supervisors and students.

DLM Conducts Workshops

Developmental Learning Material (DLM), a commercial producer o instructional materials, is interested i conducting workshops for teachers. I you can get together 30 or more peopl who have input into selection o instructional materials like thos published by DLM, they may be able t conduct a workshop designed specificall to your needs.

Minick.

Ms. Minick explains that the system is being designed to provide teachers with computer-generated lists of readily available instructional materials related to specific skills in reading and math. To date, over 5,000 materials in levels kindergarten through twelfth grade have been identified and categorized for the computer. Ms. Minick emphasizes that all of the materials selected are available to the teacher either in her own classroom, in another classroom within the AIU, through a master teacher, or at the REACH resource center. She points out she is not listing all the materials in all classrooms but is trying to include materials that teachers have found most useful and popular.

In addition to the descriptive list of materials, the computer print-out will identify the publisher, page number, level, and location of the material. Each material also will be coded as to whether it is priority or supplementary material. Priority is defined as material that is available in most classrooms. Supplementary is used to designate new items or materials that are not easily accessible to teachers. Ms. Minick indicates that this information will be helpful to the experienced teacher who has used most of the items in her room and is looking for new material. It will also help the beginning teacher who students who have the same weakness and indicate what materials and techniques have been used and with what effect. Ms. Minick points out that this feature will also be helpful to supervisors and for teachers getting a new child in her class.

In order to accommodate the magnitude of information, the project, in conjunction with the AIU, has feased a new computer system. The computer will be used for a number of IU programs in addition to the project. The computer program format for the project was designed by Russel Guthrie at the Central Susquehanna Intermediate Unit.

At this point, the project is just about ready for the field testing phase of development. Ms. Minick describes this as the "debugging" stage. The task of entering the materials was begun in December with a minimum of two materials per skill to be entered initially.

Next year plans are to have 12 teachers with 200 students using the computer system. And in the third year, all 115 classroom teachers with 1,686 students will be included. The third year plan includes provisions to try to replicate the system in other IUs and other disability areas.

In developing the system, Ms. Minick has had the assistance of an advisory council consisting of AIU administrators, master teachers, teachers in the field test classrooms, and parents of LD students.

Developmental Learning Material (DLM), a commercial producer o instructional materials, is interested i conducting workshops for teachers. I you can get together 30 or more peopl who have input into selection o instructional materials like thos published by DLM, they may be able t conduct a workshop designed specificall to your needs.

Workshops can be as in-depth as you needs require. For example, if you want workshop on reading, it can be designe to include: fundamental information o reading and reading remediation, metho of teaching reading, and a demonstratio of the DLM products that assist teache in that skill area. Workshops can cove one or more skill areas.

DLM currently offers workshops i language development, reading mathematics, occupational therapy learning disabilities, early childhoo speech/hearing and IEP (Individualize Educational Plans). Each workshop i conducted by a DLM consultant who ha at least a masters degree and at least fou years teaching experience.

DLM also holds workshops gear only to product demonstration. If yo would like more information about DL workshops, write to the Director o Workshops, Sharon Auten, DLM, 744 Natchez Avenue, Niles, Illinois 60648.

READING ASSESSMENT - SHEETS

SAMPLE

PHONIC ANALYSIS 001

Given a commercial or teacher-made worksheet, _______________ will prove competent with __% accuracy in the following Phonic Analysis skills:

I. Directions: Have student do all phonetic analysis and Section Id structural analysis on separate sheet of paper.

A. If student is functioning at a lower level, say the following words and ask student to write or say the letter and the sound you indicate.

B. If student is functioning at a higher level, give the letter/sound and tell student to supply the word. e.g. Tell me a word that starts with the b sound.

_____IDENTIFIES/PRODUCES INITIAL SOUND

Words for Initial Consonants

001-001	b	budge	001-021	t	tab
001-002	"	"	001-022	"	"
001-003	j, g	jilt	001-023	f, ph	fad
001-004	"	"	001-024	"	"
001-005	r	rye	001-025	n	nudge
001-006	"	"	001-026	"	"
001-007	y	yen	001-027	v	valve
001-008	"	"	001-028	"	"
001-009	c, k	kale	001-029	g	gird
001-010	"	"	001-030	"	"
001-011	l	leash	001-031	p	poach
001-012	"	"	001-032	"	"
001-013	s	seep	001-033	w	wince
001-014	"	"	001-034	"	"
001-015	z	zing	001-035	h	hub
001-016	"	"	001-036	"	"
001-017	d	dude	001-039	x	x-ray
001-018	"	"	001-040	"	"
001-019	m	mope			
001-020	"	"			

_____IDENTIFIES/PRODUCES FINAL SOUNDS

Words for Final Consonants

001-041	b	grab	001-059	t	wheat
001-042	"	"	001-060	"	"
001-043	j,dge,ge	midge	001-061	f	waif
001-044	"	"	001-062	"	"
001-045	r	clear	001-063	n	bran
001-046	"	"	001-064	"	"
001-047	c,ck,k	lac	001-065	v	valve
001-048	"	"	001-066	"	"
001-049	l	ball	001-067	g	flag
001-050	"	"	001-068	"	"

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM

SAMPLE

READING CHECKLIST

GRADE LEVELS

I = Grade level at which skill is first introduced

M = Grade level at which skill should be mastered for a student in a regular education program.

READINESS 011

Given a commercial or teacher-made worksheet ______________ will prove competent with ___% accuracy on the following readiness skills:

		GRADE LEVEL
011-001	Prints first and last name	I-PP;M-PP
011-002	Recognizes/verbally names upper case letters of the alphabet	I-PP;M-PP
011-003	Recognizes/verbally names lower case letters of the alphabet	I-PP;M-PP
011-004	Prints upper case letters of the alphabet by dictation	I-PP;M-1
011-005	Prints lower case letters of the alphabet by dictation	I-PP;M-1

PHONIC ANALYSIS (Primary) 001

Given a commercial or teacher-made worksheet ______________ will prove competent with ___% accuracy in the following Phonic Analysis skills:

Initial Consonants A. Identifies initial sound from spoken word
B. Produces word given initial letter name

_____ IDENTIFIES/PRODUCES INITIAL SOUND

	A		B		A		B	
001-001 b	___	001-002 b	___	001-021 t	___	001-022 t	___	
001-003 j,g	___	001-004 j,g	___	001-023 f,ph	___	001-024 f,ph	___	
001-005 r	___	001-006 r	___	001-025 n	___	001-026 n	___	
001-007 y	___	001-008 y	___	001-027 v	___	001-028 v	___	
001-009 c,k	___	001-010 c,k	___	001-029 g	___	001-030 g	___	
001-011 l	___	001-012 l	___	001-031 p	___	001-032 p	___	
001-013 s	___	001-014 s	___	001-033 w	___	001-034 w	___	
001-015 z	___	001-016 z	___	001-035 h	___	001-036 h	___	I-PP,1
001-017 d	___	001-018 d	___					M-1
001-019 m	___	001-020 m	___	001-039 x	___	001-040 x	___	I-2;M-2

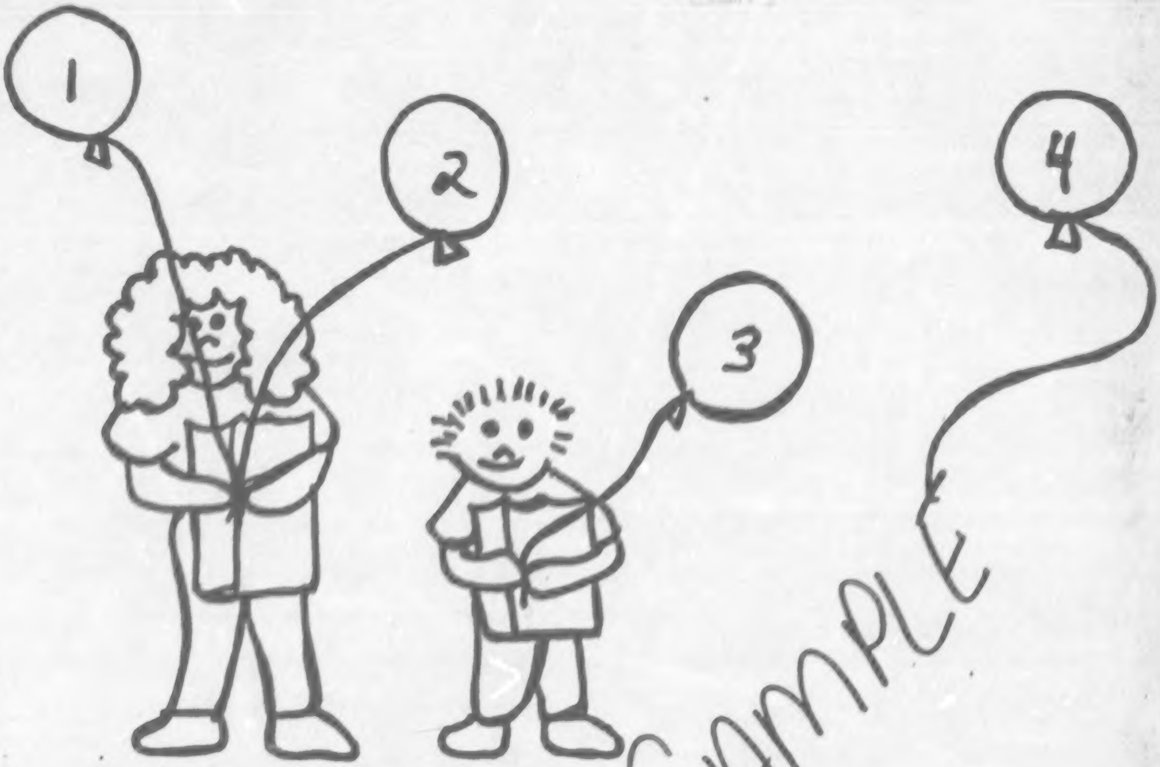
Final Consonants A. Identifies final sound from spoken word
B. Produces word given final letter name

_____IDENTIFIES/PRODUCES FINAL SOUNDS

	A		B		A		B	
001-041 b	___	001-042 b	___	001-059 t	___	001-060 t	___	I-1;
001-043 j,g	___	001-044 j,g	___	001-061 f	___	001-062 f	___	M-2
001-045 r	___	001-046 r	___	001-063 n	___	001-064 n	___	
001-047 c,k,ck	___	001-048 c,k,ck	___	001-065 v	___	001-066 v	___	
001-049 l	___	001-050 l	___	001-067 g	___	001-068 g	___	
001-051 s	___	001-052 s	___	001-069 p	___	001-070 p	___	
001-053 z	___	001-054 z	___					
001-055 d	___	001-056 d	___	001-073 x	___	001-074 x	___	I-2;M-2
001-057 m	___	001-058 m	___					

DIRECTIONALITY AND BODY IMAGE 100

Given a commercial or teacher-made worksheet, ______________ will prove competent with _____% accuracy on the following Directionality and Body Image concepts:



SAMPLE

_____RECOGNIZES COLORS

Recognizes Color(s)

100-001

Color Number 1 balloon red

Color Number 2 balloon blue

Color Number 3 balloon yellow

Color Number 4 balloon green

_____DISCRIMINATES AND/OR USES TERMS DENOTING STRUCTURAL ATTRIBUTES e.g. big, little, tall, short

Recognizes Big and Little

100-002

Put an X on the big bag.

Circle the little bag.

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM

Grade Levels
I = Grade level at which skill is first introduced
M = Grade level at which skill should be mastered for a student in a regular education program

MATH CHECKLIST

DIRECTIONALITY AND BODY IMAGE 100

Given a commercial or teacher-made worksheet, _______________ will prove competent with _____% accuracy on the following Directionality and Body Image Concepts:

_____RECOGNIZES COLORS

Recognize Color(s): Colors balloons appropriate colors (given directions)
100-001

I-K
M-K
red____ blue____ yellow____ green____

_____DISCRIMINATES AND/OR USES TERMS DENOTING STRUCTURAL ATTRIBUTES
e.g. big, little, tall, short, thick, thin

Recognize Big and Little: Marks big or little when directed
100-002
I-K
M-K
big or little _____

Recognize Tall or Short: Marks tall or short when directed
100-003
tall or short _____

SAMPLE

Recognize Long and Short: Marks long or short when directed
100-004
I-K
M-K
long or short

One and Two Identity: Marks one and two when directed

I-K
M-1
100-005 identify "1"_____
100-006 identify "2"_____

_____IDENTIFIES BODY PARTS

Body Parts: Recognizes body parts
100-007

I-K
M-1

elbow ____
hip ____
ankle ____
shin ____
forehead ____
shoulder ____
wrist ____
knee ____
ear ____
jaw ____
waist ____
neck ____
head ____
toes ____
eyebrows ____
eyelashes ____
cheeks ____
chin ____
lips ____
fingernails ____

_____RECOGNIZES LEFT/RIGHT

Recognize Left/Right: (generalize to paper) Selects item as directed
100-008
I-1
M-1
left_____ right_____

APPENDIX B

ALLEGHENY INTERMEDIATE UNIT

Exceptional Children's Program
Improved Individual Instruction Program

In-service Evaluation Form

A series of six topics was addressed during this workshop. We are interested in determining the effectiveness of the presentation and your understanding of the materials. Please indicate how well the discussion of each topic fulfilled the following set of criteria using the rating scale 1=very well, 2=moderately well, 3=adequately well, 4=inadequately, 5=poorly, 6=non-applicable. The criteria are:

Clarity of presentation
Opportunity for you to participate
Sufficient information to allow you to explain the topic to
a third party
Materials which could be used by you

	Clarity	Participation	Sufficient Information	Useful Materials
1. Overview of project --its purpose and goals	____	____	____	____
2. Description of evaluation instruments and time lines.	____	____	____	____
3. Operation of computer system	____	____	____	____
4. Description of computer forms	____	____	____	____
5. Directions for completing computer forms	____	____	____	____
6. Responsibilities of project teachers	____	____	____	____

Please indicate by circling the appropriate response if there was sufficient time for presentation and/or discussion of the six topics by circling Yes, No, or Not Applicable (NA).

		Presentation			Discussion	
1.	Overview of project	Yes	No	NA	Yes	No	NA
2.	Description of evaluation instruments and time lines	Yes	No	NA	Yes	No	NA
3.	Operation of computer system	Yes	No	NA	Yes	No	NA
4.	Description of computer forms	Yes	No	NA	Yes	No	NA
5.	Directions for completing computer forms	Yes	No	NA	Yes	No	NA
6.	Responsibilities of project teachers	Yes	No	NA	Yes	No	NA

ALLEGHENY INTERMEDIATE UNIT
Exceptional Children's Program
Improved Individualized Instruction Program
Implementation Checklist

Basing your answers on the operation of the entire system, please complete the following questions. Your comments and those supplied by the Master Teachers will be used to help make the system more efficient. Your time and effort in completing this checklist is appreciated.

1. How easy was it for you to complete each of the following forms?

	very easy	somewhat easy	don't know	somewhat difficult	very difficult
a. Student Checklist and Progress Form	____	____	____	____	____
b. Request for Resource Material	____	____	____	____	____
c. Evaluation of Resource Materials	____	____	____	____	____
d. Evaluation of Student Performance on Resource Material	____	____	____	____	____

COMMENTS:

2. How important do you feel each form was to the operation of the overall system?

	very important	somewhat important	don't know	somewhat unimportant	very unimportant
a. Student Checklist and Progress Form	____	____	____	____	____
b. Request for Resource Material	____	____	____	____	____
c. Evaluation of Resource Materials	____	____	____	____	____
d. Evaluation of Student Performance on Resource Material	____	____	____	____	____

COMMENTS:

3. After you requested resources from the computer, how easy was it to obtain them?

______	______	______	______	______
very easy	somewhat easy	don't know	somewhat difficult	very difficult

COMMENTS:

4. After you requested a printout and resources, what was the shortest length of time it took for you to receive them? (Please specify whether it was hours, days, week(s)).

COMMENTS:

5. After you requested a printout and resources, what was the longest length of time it took for you to receive them? (Please specify whether it was hours, day(s), week(s)).

COMMENTS:

6. Did you always receive the resources that you requested? (Circle one) Yes No

If no, how many times did you not. ________

COMMENTS:

7. Did you ever receive a resource sent to you that was not the one you requested?

Circle one. Yes No

If yes, how many times. ________

COMMENTS:

8. Please complete the following questions basing your answers on the operation of the entire system.

Weaknesses:

Strengths:

Is there anything you would like to see changed?

ADDITIONAL COMMENTS:

ALLEGHENY INTERMEDIATE UNIT
Exceptional Children's Program
Improved Individual Instruction Program
Master Teacher Checklist

Based only on your observations of, or feedback from, the teachers in the Field Testing phase, please answer the following questions. Please do not directly ask them these questions, we are interested in your perceptions of the workings of the system.

1. How easy was it for the teachers to complete each of the following forms?

	very easy	somewhat easy	don't know	somewhat difficult	very difficult
a. Student Checklist and Progress Form	____	____	____	____	____
b. Request for Resource Material	____	____	____	____	____
c. Evaluation of Resource Material	____	____	____	____	____
d. Evaluation of Student Performance on Resource Material	____	____	____	____	____

COMMENTS:

2. How important was each form to the operation of the overall system?

	very important	somewhat important	don't know	somewhat unimportant	very unimportant
a. Student Checklist and Progress Form	____	____	____	____	____
b. Request for Resource Material	____	____	____	____	____
c. Evaluation of Resource Materials	____	____	____	____	____
d. Evaluation of Student Performance on Resource Material	____	____	____	____	____

COMMENTS:

3. After the teachers requested resources from the computer, how easy was it to obtain them?

________	________	________	________	________
very easy	somewhat easy	don't know	somewhat difficult	very difficult

COMMENTS:

4. After the teachers requested a print-out and resources, what was the shortest length of time it took for them to receive the print-out and resources? (Please specify whether it was hours, day(s), or week(s)).

COMMENTS:

5. After the teachers requested a print-out and resources, what was the longest length of time it took for them to receive the print-out and resources? (Please specify whether it was hours, day(s), or week(s)).

COMMENTS:

6. Did the teachers always receive the resources that they requested?

(Circle one) Yes No Don't know.

COMMENTS:

7. Did the teachers ever receive a resource sent to them that was not the one they requested?

(Circle one) Yes No Don't know.

If yes, how many times.

COMMENTS:

8. Please complete the following questions basing your answers on the operation of the entire system.

Weaknesses:

Strengths:

Is there anything you would like to see changed?

ADDITIONAL COMMENTS:

9. Please comment on how you feel the classroom was made more efficient by the resources being on hand.

Teacher Name ______________________________

Teacher Number ______________________________

Listed below are the resources matching the strand and skill numbers we sent to you. Please check yes or no for each of the material's accuracy in the 8 areas being evaluated. For a further explanation of the 8 evaluation items, check the reference form given to you previously. Additional comments for each item may be written on the back of this form.

This form is designed as an evaluation of the resource and its merits only. Do not evaluate it on the basis of a particular student's performance using the resource. Only judge those items which pertain to your use of the material; leave blank those questions which do not apply. If your answer to number 1 is no, do not answer questions 2 through 8 for that resource.

	RESOURCE NUMBER	STRAND/SKILL	Did you use this resource?	Resource appropriate for skill	Information given was accurate	Instructional level appropriate for skill	Presentation appropriate for level	Sufficient material presented	Directions given, if needed	Correct Reach # Given
			1	2	3	4	5	6	7	8
Title:	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no
	__________	_____/_____	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no	___yes ___no

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

Teacher Resource Questionnaire

SAMPLE

	Very Familiar	Somewhat Familiar	Unfamiliar	Don't Know
1. How familiar are you with new and/or different resource materials that you do not necessarily have in your classroom? (You do not need to know the specific names of the materials.)	VF	SF	U	DK
2. How familiar are you with new and/or different resource materials known by their specific names?	VF	SF	U	DK

3. Based on your experience of previous years, did you use a wider range of resource materials this year?

Wider Range ____
Same as Always ____
Fewer than in previous years ____

A. If you did use a wider range of resource materials:

Do you feel this wider range of knowledge about resource materials assisted you professionally?

YES ( ) NO ( ) NO DIFFERENCE ( )

Do you feel this wider range of knowledge about resource materials was beneficial instructionally?

YES ( ) NO ( ) NO DIFFERENCE ( )

B. If you did not use a wider range of resource materials this year:

Did you become aware of more materials that you may want to use in the future?

YES ( ) NO ( ) NO DIFFERENCE ( )

5. Do you feel you had more materials available to you this year if you had wanted to use them?

YES ( ) NO ( ) NO DIFFERENCE ( )

6. Please check the option that best applies to your situation:

I try to use new and different materials other than those in my classroom.

Very Often ____
Frequently ____
Sometimes ____
Infrequently ____
Never ____

7. What was the average amount of time it took you to write a 1979-1980 IEP?

________ hours ________ minutes

8. What was the average amount of time it took you to update an average 1979-1980 IEP?

________ hours ________ minutes

ALLEGHENY INTERMEDIATE UNIT
Exceptional Children's Program
Improved Individual Instruction Program

IEP Collection Instrument

SAMPLE

Student's Name ______________________________

Student's Number ______________________________

Teacher's Name ______________________________

Date of IEP Update ______________________________

1. Number of instructional objectives in

    ______ mid-September (2nd-3rd week)

    ______ mid-January (2nd-3rd week)

    ______ end of May/beginning of June

2. How many objectives were updated in

    ______ mid-January

    ______ end of May/beginning of June

3. How long did it take the teacher to prepare objectives for the IEP conference?

    ____

    ____

ALLEGHENY INTERMEDIATE UNIT
Exceptional Children's Program
Improved Individual Instruction Program

IEP Rating Form

IEP was written by _______ IIIP Teacher

_______ non-IIIP Teacher

Date of IEP Update _______________

Classroom # ______________________ Student # ____________________

Please rate the adequacy of the overall IEP and the objectives as a whole using the following scale:

1 = very adequate
2 = adequate
3 = inadequate

1.	Objectives	1	2	3
2.	Overall IEP	1	2	3

SAMPLE

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

Completeness Checklist

SAMPLE

1. Do you have a system for listing skill breakdowns into specific skill areas per student in your L.D. classroom?

YES ______

NO ______

If yes, how complete is the system in terms of listing only skills needing remediation for each student?

Very Complete ______
Somewhat Complete ______
Not Complete At All ______

2. Do you have a system to report progress that was made in skill areas for each student during the year?

YES ______

NO ______

If yes, how complete is the system in terms of accurately reporting progress for each skill during each grading period?

Very Complete ______
Somewhat Complete ______
Not Complete At All ______

3. Do you feel the performance codes on the computer generated forms adequately indicate performance made by the students in your L.D. class?

YES ______

NO ______

If no, why not? ____

____

____

If yes, how helpful are the performance codes?

Very Helpful ______
Somewhat Helpful ______
Not Helpful At All ______

If yes, how complete are the performance codes in terms of accurately indicating student progress?

Very Complete ______
Somewhat Complete ______
Not Complete At All ______

4. Have you received the printouts of suggested resource list for students in your classroom?

YES ______

NO ______

If yes, how helpful were the printouts?

Very Helpful ______
Somewhat Helpful ______
Not Helpful At All ______

If yes, how complete were the printouts in terms of information accuracy and resource appropriateness?

Very Complete ______
Somewhate Complete ______
Not Complete At All ______

5. Have you received copies of mastery tests to be used with students in your classroom?

YES ______

NO ______

If yes, how helpful were the tests?

Very Helpful ______
Somewhat Helpful ______
Not Helpful At All ______

If yes, how complete were the tests in terms of accurately assessing student performance at an appropriate level?

Very Complete ______
Somewhat Complete ______
Not Complete At All ______

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

SUPERVISOR QUESTIONNAIRE

Supervisor's Name ____

Listed below are the components provided through the computer system. Please indicate the degree of benefit each of the components has for you in your supervisory capacity.

	extremely useful	useful	of some use	of little or no use
1. Skills not remediated	______	______	______	______
2. Skills mastered	______	______	______	______
3. Dates of mastery test	______	______	______	______
4. Mastery test scores	______	______	______	______
5. Clean format of information	______	______	______	______
6. Progress throughout each grading period	______	______	______	______
7. Specific mastery test	______	______	______	______

1. As a result of the project what types of assistance can you offer teachers and to what extent? Check as many "yes" as you agree with. When you check yes, please indicate the extent of assistance.

			To What Extent			
	Yes	No	A Lot	Some	Not Very Much	None
a) Offer assistance on additional resources that could be used.						
b) Offer assistance on where a child is breaking down.						
c) Offer assistance on what skills are hampering a child's remediation.						
d) Offer new teachers more help on curriculum, i.e. new resources.						

2. Because of the specificity and clean format, is it

easier ____
harder ____
require same amount of work ____

to zero in on student's skill deficits.

3. Because of the specificity and clean format, is it

easier ____
harder ____
require same amount of work ____

to give assistance to L.D. teachers.

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

PARENT QUESTIONNAIRE

Dear Parents,

The staff of the Improved Individual Instruction Program is currently trying to determine the effectiveness of its program in meeting the needs of your child. Your comments are essential in order for the staff to know if your needs are being met.

Please take a few minutes to complete the enclosed questionnaire and return it immediately. Thank you in advance for your cooperation.

Sample

1. Please indicate whether you have been given more information concerning your child's educational status this school year than in previous years for each of the following: (Circle one answer for each item)

a. Your child's skill level	YES	NO
b. Your child's progress since last grading period	YES	NO
c. Your child's progress since the beginning of the year	YES	NO

2. Please indicate how satisfied you are with the format of the following areas on your child's Performance Report Form by circling the response which best describes how you feel.

	Very Satisfied	Satisfied	Undecided	Dissatisfied	Very Dissatisfie
a. Your child's skill level	VS	S	U	D	VD
b. Your child's progress since last grading period	VS	S	U	D	VD
c. Your child's progress since the beginning of the year	VS	S	U	D	VD

3. Are you satisfied with the number of times you received your child's Performance Report Forms? (Circle one)

YES NO

If no, how often do you wish to receive a copy of your child's report?

_________ twice yearly
_________ at the end of the year
_________ other, please specify ____________________

4. Please indicate your degree of understanding of each of the following by circling the response which best describes how you feel.

	Very Easy	Easy	Uncertain	Difficult	Very Difficult
a. Performance codes	VE	E	U	D	VD
b. Description of the goals	VE	E	U	D	VD
c. Description of the skills	VE	E	U	D	VD

5. General Comments:

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

TEACHER EVALUATION OF COMPUTER GENERATED PORTION OF THE IEP

To measure the effectiveness and completeness of the Computer Generated portion of the Individual Education Program, please indicate your reactions to each of the questions below.

1. My overall reaction to the Computer Generated portion of the I.E.P. is:

   ( ) excellent   ( ) good   ( ) fair   ( ) poor

2. Was time saved in doing the I.E.P. because you used the Computer Generated form?

   ( ) yes   ( ) no   ( ) don't know

   If yes, estimate the amount of time saved per I.E.P. ____________________

3. Was there time saved by having the computer generate vital statistics already in the data base? (This is the information that appears on pages 1 and 2 of the I.E.P.)

   ( ) yes   ( ) no   ( ) don't know

4. Was there time saved in having specific mastery tests listed for each skill on the I.E.P.?

   ( ) yes   ( ) no   ( ) don't know

5. How understandable is the format of the Computer Generated portion of the I.E.P.?

   ( ) very clear   ( ) clear   ( ) hard to understand

6. How complete do you feel the Computer Generated form is as compared to the handwritten I.E.P.?

   ( ) more complete   ( ) just as complete   ( ) not as complete

7. Does the Computer Generated portion allow for adaptability if other skills need to be added to the I.E.P.?

   ( ) yes   ( ) no   ( ) don't know

8. How efficient is the Computer Generated portion of the I.E.P.?

( ) very efficient ( ) efficient ( ) uncertain ( ) inefficient ( ) very inefficient

9. How complete is the Computer Generated portion of the I.E.P. in terms of adequately covering reading/math skills and evaluation conditions?

( ) very complete ( ) complete ( ) uncertain ( ) incomplete ( ) very incomplete

10. Do you feel more instructional time was available because you used the computer-generated form?

( ) yes ( ) no ( ) don't know

11. General Comments:

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

PARENT QUESTIONNAIRE ON THE COMPUTER GENERATED PORTION OF THE IEP

To measure the effectiveness and completeness of the Computer Generated portion of the Individual Education Program, please indicate your reactions to each of the questions below.

1. My overall reaction to the Computer Generated portion of the I.E.P. is:

   ( ) excellent ( ) good ( ) fair ( ) poor

2. Is the Computer Generated portion of the I.E.P. easy to understand?

   ( ) yes ( ) no ( ) don't know

3. Is more conference time with the teacher available to you because most of the objectives are already on the form?

   ( ) yes ( ) no ( ) don't know

4. How much time do you feel the Computer Generated portion of the I.E.P. saves for the teacher?

   ( ) a lot ( ) some ( ) a little ( ) none

5. How complete are the skills on the Computer Generated portion of the I.E.P. as compared to the handwritten I.E.P.?

   ( ) more complete ( ) just as complete ( ) not as complete

6. Does the Computer Generated portion allow for adaptability if other skills need to be added to the I.E.P.?

   ( ) yes ( ) no ( ) don't know

7. COMMENTS:

APPENDIX C

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

TEACHER DATA INPUT FORM

SAMPLE

1. Teacher Number - Social Security Number

_ _ _   _ _   _ _ _ _

2. Teacher Name (Last name, first name, middle initial)

_ _

3. Location

_ _

4. Grade Level

_

5. Employment Date

_ _   _ _   _ _

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

(✓) Initial
( ) Change
( ) Delete
( ) Update of Test Scores

STUDENT DATA INPUT FORM

1. Student Number (Leave blank if new information)

______

2. Student Name (Last name, first name, middle initial)

[redacted] ___________

3. Program in Which Enrolled (See list of abbreviations)

ELD ___ ___

4. District of Student's Residence (See list of abbreviations for District)

Q_V_ ___

5. Location of Program (Building)

Osborne School ___________

6. Visual/Auditory/Other

V

7. WRAT Test Scores

Reading	Arithmetic	Spelling	Date Month/Year
R02.05	A03.06	S04.00	064.79

8. WRAT Test Scores (one year ago)

Reading	Arithmetic	Spelling	Date Month/Year
R01.06	A03.05	S03.02	06.78

9. Teacher Number

L05354485

10. Date Due Process (month/day/year)

06 13 76
M M D D Y Y

11. Date of Entry into L.D. Program

09 06 76
M M D D Y Y

12. Date of Withdrawal from L.D. Program

__ __ __
M M D D Y Y

13. Date of Birth (month/day/year)

12 16 68
M M D D Y Y

14. Date of Current I.E.P. (month/day/year)

09 30 78
M M D D Y Y

15. Type of Delivery System

PR

16. Date of Last Psychological Re-evaluation (month/day/year)

01 15 78
M M D D Y Y

17. Race

W_ __

18. Sex

[✓ M] F

19. Phone Number

3235834

20. Parent/Guardian Name and Address

[redacted]

116

ALLEGHENY INTERMEDIATE UNIT

117

Suite 1300, Two Allegheny Center
Pittsburgh, PA. 15212

EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

STUDENT CHECKLIST

PAGE 1

011 PRE-READING
TI REQ GRADES MASTERY
T

Prints name
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes upper case letters
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes lower case letters
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Prints upper case letters
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

READING SKILLS

Prints lower case letters
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

001 PHONETIC ANALYSIS (PRI.)
TI REQ GRADES MASTERY
T

Identifies initial "B"
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "B"
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "J", "G"
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "J", "G"
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "R"
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "R"
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "Y" (consonant)
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "Y" (consonant)
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "C", "K"
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "C", "K"
☐ 010 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "L"
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "L"
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "S"
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "S"
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "Z"
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

001 Produces initial "X"
☐ 040 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "B"
☐ 041 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "B"
☐ 042 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "J", "G" (dge, ge)
☐ 043 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "J", "G" (dge, ge)
☐ 044 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "R"
☐ 045 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "R"
☐ 046 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "C", "K", "CK"
☐ 047 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "C", "K", "CK"
☐ 048 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "L"
☐ 049 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "L"
☐ 050 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "S"
☐ 051 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "S"
☐ 052 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "Z"
☐ 053 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "Z"
☐ 054 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "D"
☐ 055 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "D"
☐ 056 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "M"
☐ 057 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "M"
☐ 058 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "T"
☐ 059 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "T"
☐ 060 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "F"
☐ 061 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "F"
☐ 062 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

001 Identifies middle "Z"
☐ 089 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "Z"
☐ 090 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "D"
☐ 091 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "D"
☐ 092 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "M"
☐ 093 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "M"
☐ 094 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "T"
☐ 095 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "T"
☐ 096 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "F"
☐ 097 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "F"
☐ 098 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "N"
☐ 099 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "N"
☐ 100 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "V"
☐ 101 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "V"
☐ 102 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "G"
☐ 103 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "G"
☐ 104 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "P"
☐ 105 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "P"
☐ 106 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "H"
☐ 107 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "H"
☐ 108 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "X"
☐ 109 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "X"
☐ 110 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SP"
☐ 111 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

001 Final consonant blend "ND"
☐ 136 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "NK"
☐ 137 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "LT"
☐ 138 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant digraph "SH"
☐ 139 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant digraph "CH"
☐ 140 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant digraph "TH"
☐ 141 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant digraph "PH"
☐ 142 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant digaph "WH"
☐ 143 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant digraph "SH"
☐ 144 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant digraph "CH"
☐ 145 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant digraph "TH"
☐ 146 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant digraph "PH"
☐ 147 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Long vowel sound "A"
☐ 148 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Long vowel sound "E"
☐ 149 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Long vowel sound "I"
☐ 150 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Long vowel sound "O"
☐ 151 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Long vowel sound "U"
☐ 152 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Short vowel sound "A"
☐ 153 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "Z"
☐ 016 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "D"
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "D"
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "M"
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "M"
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "T"
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "T"
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "F", "PH"
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "F", "PH"
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "N"
☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "N"
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "V"
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "V"
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "G"
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "G"
☐ 030 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "P"
☐ 031 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "P"
☐ 032 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "W"
☐ 033 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "W"
☐ 034 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "H"
☐ 035 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "H"
☐ 036 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "Q"
☐ 037 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces initial "Q"
☐ 038 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies initial "X"
☐ 039 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "N"
☐ 063 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "N"
☐ 064 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "V"
☐ 065 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "V"
☐ 066 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "G"
☐ 067 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "G"
☐ 068 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "P"
☐ 069 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "P"
☐ 070 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies final "X"
☐ 073 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces final "X"
☐ 074 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "B"
☐ 075 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "B"
☐ 076 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "J", "G"
☐ 077 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "J", "G"
☐ 078 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "R"
☐ 079 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "R"
☐ 080 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "Y"
☐ 081 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "Y"
☐ 082 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "C", "CK", "K"
☐ 083 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "C", "CK", "K"
☐ 084 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "L"
☐ 085 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "L"
☐ 086 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies middle "S"
☐ 087 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Produces middle "S"
☐ 088 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "TW"
☐ 112 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "BL"
☐ 113 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "GR"
☐ 114 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "ST"
☐ 115 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SW"
☐ 116 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "CL"
☐ 117 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "CR"
☐ 118 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SL"
☐ 119 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "FL"
☐ 120 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "TR"
☐ 121 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "FR"
☐ 122 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SM"
☐ 123 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SN"
☐ 124 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "BR"
☐ 125 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "DR"
☐ 126 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SPR"
☐ 127 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "STR"
☐ 128 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Initial consonant blend "SPL"
☐ 129 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "ST"
☐ 130 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "CK"
☐ 131 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "MP"
☐ 132 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "LD"
☐ 133 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "NT"
☐ 134 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Final consonant blend "NG"
☐ 135 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Short vowel sound "E"
☐ 154 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Short vowel sound "I"
☐ 155 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Short vowel sound "O"
☐ 156 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Short vowel sound "U"
☐ 157 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Regular vowel combination "EE"
☐ 158 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Regular vowel combination "AI"
☐ 159 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Regular vowel combination "OA"
☐ 160 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Regular vowel combination "AY"
☐ 161 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Regular vowel combination "$\overline{\text{EA}}$"
☐ 162 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "OW" (cow)
☐ 163 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "AU" (taught)
☐ 164 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "IE" (piece)
☐ 165 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "OW" (bow)
☐ 166 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "AW" (awning)
☐ 167 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "$\overline{\text{EA}}$" (seat)
☐ 168 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "EW" (new)
☐ 169 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular vowel combination "EA" (head)
☐ 170 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "CK" (K)
☐ 171 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "QU"
☐ 172 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "IGHT"
☐ 173 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "SC" (scene)
☐ 174 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "SCH" (SK)
☐ 175 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "IGH"
☐ 176 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Irregular phonetic "EAR"
☐ 177 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

FORM #3-A, 3/70 NCS Trans- 15-10

PAGE 2

Be [illegible] to complete student number and grading period
Use No. 2 black lead pencil *only*
Make heavy black marks that fill the circle completely
Make any erasures complete, and make no stray marks

GRADING PERIOD
⑥ ⑤ ④ ③ ② ① ● ☐

STUDENT NUMBER
4 ○ ① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨
8 ○ ① ② ③ ④ ⑤ ⑥ ⑦ ● ⑨
6 ○ ① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨
1 ○ ● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
0 ● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

STUDENT NAME

001 Identifies hard "C"
☐ 178 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies hard "G"
☐ 179 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies soft "C"
☐ 180 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies soft "G"
☐ 181 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "AR"
☐ 182 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "UR"
☐ 183 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "OY"
☐ 184 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "ER"
☐ 185 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "OR"
☐ 186 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "OO" (moon)
☐ 187 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "IR"
☐ 188 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "OI"
☐ 189 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies diphthong "OO" (foot)
☐ 190 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies silent letter "B" (comb)
☐ 191 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies silent letter "G" (gnaw)
☐ 192 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies silent letter "K" (knife)
☐ 193 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Vowel sound "Y"
☐ 194 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 195 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

002 STRUCTURAL ANALYSIS (PRI.)
TI | REQ | | MASTERY

002 Forms/uses contraction LET'S
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction HAVEN'T
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction COULDN'T
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WOULDN'T
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction SHOULDN'T
☐ 030 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WASN'T
☐ 031 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction DOESN'T
☐ 032 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WEREN'T
☐ 033 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction THEY'RE
☐ 034 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation "." (period)
☐ 035 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation "?" (question mark)
☐ 036 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation " " (quotes)
☐ 037 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation "," (comma)
☐ 038 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation "!" (exclamation point)
☐ 039 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses punctuation "Capital Letters"
☐ 040 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Determines syllable count
☐ 041 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Syllables: vowel per syllable
☐ 042 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Syllables: root not divisible
☐ 043 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Syllables: blends not divisible
☐ 044 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Suffix/prefix are syllables
☐ 045 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Vowel, cons., cons ÷ vowel, cons./cons
☐ 046 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Vowel, cons. usually vowel/cons. (pu/pil)
☐ 047 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Vowel, cons. can ÷ vowel, cons. (wag/on)
☐ 048 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

004 Third grade level skills
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Fourth grade level skills
☐ 005 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

005 ORAL READING COMPREHENSION
TI | REQ | GRADES | MASTERY

T
Recalls what was read
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Remembers where to find answers
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Reads to obtain answers
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Draws conclusions from facts
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Verifies a statement
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds pr[illegible]
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds the main idea
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds specific information
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses page numbers and title
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes emotional reaction
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds cause and effect
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Defines relationships
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds support information
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Selects facts for main idea
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Reads for definite purpose
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Verify answer, opinion, hypothesis
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Makes inferences
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Interprets information
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies/interprets feelings and attitudes
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

007 Supplies synonyms
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Supplies antonyms
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses correct homonyms
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Abbreviates days of week
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Abbreviates months of year
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Abbreviates forms of address
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Abbreviates location terms
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Abbreviates arithmetic terms
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Miscellaneous abbreviations
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies similes
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies metaphors
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

008 STRUCTURAL ANALYSIS (INTER.)
TI | REQ | GRADES | MASTERY

T
Recognizes prefix "UN"
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "RE"
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "DIS"
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "A"
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "EX"
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "BE"
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "IN"
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "PRE"
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "PRO"
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes prefix "NON"
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

[redacted]
SSN

[redacted]
TEACHER NAME

STRUCTURAL ANALYSIS (PRI.)
TI REQ GRADES MASTERY

T
Gives plural form "S"
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives plural form "ES"
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives verb form with "S"
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives verb form with "ED" (D)
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives verb form with "ED" (T)
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives verb form with "ING"
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies compound words
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies/gives rhyming words
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives possessive form "'S"
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses comparative adjectives
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives verb form "N", "EN"
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction I'M
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WON'T
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction HE'S
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WE'VE
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction I'LL
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction ISN'T
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction SHE'S
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction WE'RE
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction CAN'T
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction I'VE
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction YOU'RE
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction I'D
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction DON'T
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Forms/uses contraction IT'S
☐ 02 Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Vowel, cons. can ÷ vowel, cons. (wag/on)
☐ 048 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
/ consonant plus LE (ta/ble)
☐ 049 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Y to I plus ending—nouns
☐ 050 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Y to I plus ending—verbs
☐ 051 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies accented syllables
☐ 052 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Gives possessive form S'
☐ 053 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 054 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

003 WORD RECOGNITION
TI REQ GRADES MASTERY

T
Calls pre-primer words
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls primer words
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls first grade words
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls second grade, first level words
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls second grade, second level words
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls third grade, first level words
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls third grade, second level words
☐ 007 ● Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls fourth grade words
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls fifth grade words
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls sixth grade words
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls seventh grade words
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls eighth grade words
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calls ninth grade words
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

004 ORAL READING
TI REQ GRADES MASTERY

T
Primer level skills
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
First grade level skills
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Second grade level skills
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ②

Identifies/interprets feelings and attitudes
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Selects facts to remember
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

006 SILENT READING COMPREHENSION
TI REQ GRADES MASTERY

T
Follows printed directions
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Associates symbol to object/action
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recalls what was read
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Picks up contextual clues
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Sequences events
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Draws conclusions
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Predicts outcome
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds main idea
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Obtains general information
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Discriminates visual stimuli via words
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds details
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Makes inferences
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Identifies mood
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Verifies answers
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Summarizes story
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes character traits
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Analysis of author's view
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Detects propoganda
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Separates fact and opinion
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

007 VOCABULARY EXPANSION
TI REQ GRADES MASTERY

T
Defines multiple meanings
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes prefix "NON"
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "LY"
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "FUL"
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "LESS"
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "NESS"
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "TEEN"
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "ER"
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "Y"
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "TION"
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "SION"
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "SHIP"
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "WARD"
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "MENT"
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "OUS"
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "ERN"
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Recognizes suffix "SOME"
☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Irregular plural "F to VES"
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Irregular plural "stays same"
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Irregular plural "changes form"
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Comparative/superlative adjective "ER to EST"
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Y to I, then add "ER", "EST"
☐ 030 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Comparative/superlative adjective "change form"
☐ 031 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Comparative/superlative adjective "more, most"
☐ 032 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Verb tenses—regular
☐ 033 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Verb tenses—irregular
☐ 034 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Locates pronoun referents
☐ 035 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ ① ② ③

121

008 M[illegible] of prefix "AB"

☐ 036 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "AN"

☐ 037 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "AD"

☐ 038 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "ANTE"

☐ 039 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "ANTI"

☐ 040 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "BI"

☐ 041 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "CIRCUM"

☐ 042 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "DE"

☐ 043 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "DIS"

☐ 044 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "DIA"

☐ 045 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "EX"

☐ 046 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "EM", "EN"

☐ 047 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "IM"

☐ 048 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefixes "IL, UN, IN, IR"

☐ 049 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "INTER"

☐ 051 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "IN, EN"

☐ 052 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "INTRO"

☐ 053 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "MIS"

☐ 054 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "NON"

☐ 055 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "PAN"

☐ 056 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "PER"

☐ 057 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "PERI"

☐ 058 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "POST"

☐ 059 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

008 Meaning of suffix "HOOD"

☐ 085 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ICE"

☐ 086 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ID"

☐ 087 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "TION, SION"

☐ 088 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "IZE, ISE"

☐ 089 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "IST, ITE"

☐ 090 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ITY, TY"

☐ 091 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "LING"

☐ 092 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ET"

☐ 093 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ISH"

☐ 094 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "WISE"

☐ 095 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "URE"

☐ 096 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "IVE"

☐ 097 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "LESS"

☐ 098 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "LY"

☐ 099 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "MENT"

☐ 100 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "NESS"

☐ 101 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffixes "OR, AR, ER"

☐ 102 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ORY"

☐ 103 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "IOUS, OUS"

☐ 104 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "SOME"

☐ 105 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "WARD"

☐ 106 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "Y"

☐ 107 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

009 Locates information in index

☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in almanac

☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in telephone directory

☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in yellow pages

☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand

☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

010 SURVIVAL SKILLS

T

Uses want/classified ads

☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Writes personal letter

☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Writes business letter

☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Reads/completes job application

☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Says first level survival words

☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Says second level survival words

☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand

☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

MATH SKILLS

100 DIRECTIONALITY/BODY IMAGE

TI	REQ	GRADES	MASTERY

T

Recognizes colors

☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows big and little

☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows tall and short

☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows long and short

☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows "one" identity

☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows "two" identity

☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Identifies body parts

☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes right and left

☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes top and bottom

☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

SHEET TWO

ALLEGHENY INTERMEDIATE UNIT

125

Suite 1300, 2 Allegheny Center
Pittsburgh, PA. 15232

PAGE 3

EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM

STUDENT CHECKLIST

102 Number pattern (forward odd)

☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Number pattern (backward even)

☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Number pattern (backward odd)

☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Forms numbers correctly

☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Organizes one digit over one digit

☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Organizes two digits over one digit

☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Organizes three digits over three digits

☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Organizes three digits over two digits

☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Organizes four digits over three digits

☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Positions signs correctly

☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Spaces decimals

☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Spaces dollar signs

☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Spaces number on matrix

☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Counts orally 1–100

☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Counts backwards 100–1

☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Counts orally by two (2–30)

☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Counts orally by five (5–100)

☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Counts orally by ten (10–150)

☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "PRE"
☐ 060 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "PRO"
☐ 061 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "COM, CON"
☐ 062 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "RE"
☐ 063 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "SE"
☐ 064 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "SEMI"
☐ 065 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "SUB"
☐ 066 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "SUPER"
☐ 067 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "TRANS"
☐ 068 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "TRI"
☐ 069 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of prefix "UN"
☐ 070 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ABLE, IBLE"
☐ 071 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ACY, ACE"
☐ 072 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ANCY, ANCE"
☐ 073 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffixes "AN, CAN, IAN"
☐ 074 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "AGE"
☐ 075 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ER, AR"
☐ 077 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ARY"
☐ 078 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ANT"
☐ 079 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "EN"
☐ 080 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ENCE"
☐ 081 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "ENT"
☐ 082 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "FUL"
☐ 083 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Meaning of suffix "FY, IFY"
☐ 084 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand
☐ 108 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

009 STUDY SKILLS

TI REQ GRADES MASTERY

T

Locates information in dictionary
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in table of contents
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in encyclopedia
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Locates information in glossary
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Alphabetizes by first letter
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Alphabetizes by second letter
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Alphabetizes by third letter
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Alphabetizes by fourth letter
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Uses guide words in dictionary
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Obtains definition from dictionary
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Uses diacritical marking
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Uses pronunciation key
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Uses dictionary to get synonyms
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Classifies and categorizes
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Map skills—North, South, East, West
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Maps—locate buildings
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Maps—locate names of roads
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Maps—comparative judgements
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Context clue usage
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Makes judgement decisions
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Outlining—get main idea
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Outlining—subordinate ideas
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes middle
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes up and down
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes above and below
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes over and under
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes position "on"
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes in and out
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes before and after
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes between
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Quantity—counting skills
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

101 COUNTING/GROUP CONCEPTS

TI REQ GRADES MASTERY

T

Identifies number in group
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows more than, less than
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows largest, smallest
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Knows most and least
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

102 NUMBER SEQUENCING

TI REQ GRADES MASTERY

T

Fills missing number 1–20 (forward)
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Fills missing number 1–20 (backward)
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Sequence number small to large (1–5)
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Sequence number small to large (1–12)
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Sequence number small to large (1–100)
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Sequence number small to large (101–1001)
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Number pattern (forward even)
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes printed numbers 1–10
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes printed numbers 11–100
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Recognizes printed three digit numbers
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Other skill within strand
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

103 PROCESSES

TI REQ GRADES MASTERY

T

Addition—1 digit plus 1
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Addition—1 digit plus 0
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Addition—1 digit plus 1 digit
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Addition—Associative concept
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Addition—Commutative concept
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

One column addition
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Two column addition—no regrouping
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Two column addition—with regrouping
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Addition—Horizontal equations
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Subtraction—1 digit minus 0
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Subtraction—1 digit minus 1
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Subtraction—1 digit minus 1 digit
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

2 digit minus 1 digit—no regrouping
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

2 digit minus 1 digit—with regrouping
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

2 digit minus 2 digit—no regrouping
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

2 digit minus 2 digits—with regrouping
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Subtraction—3 digit with regrouping
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Subtraction—Horizontal equations
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

Multiplication—1 digit × 1 digit horizontally
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

FORM #3-B, 3/78 NCS Tr[illegible]ptic 15-10015:321

AGE 4

GRADING PERIOD ☐ ○ ① ② ③ ④ ⑤ ⑥

Be ... complete student number and grading period.
Use No. 2 black lead pencil *only*.
Make heavy black marks that fill the circle completely.
Make any erasures complete, and make no stray marks.

128

STUDENT NUMBER
☐ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
☐ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
☐ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
☐ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
☐ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

STUDENT NAME ____________

103

T

Multiplication—1 digit × 1 digit vertically
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—Associative concept
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—Commutative concept
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—Distributive concept
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—2 digit × 1 digit—no regrouping
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplicaion—2 digit × 1 digit—with regrouping
☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—3 digit × 1 digit—no regrouping
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—3 digit × 1 digit—with regrouping
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—2 digits × 2 digits
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—3 digits × 2 digits
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—1 digit by 1 digit horizontally
☐ 030 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—1 digit by 1 digit vertically
☐ 031 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—2 digits by 1 digit—no remainder
☐ 032 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—3 digits by 1 digit—no remainder
☐ 033 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—3 digits by 1 digit—with remainder
☐ 034 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division—4 digits by 2 digits—with remainder
☐ 035 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Addition terms
☐ 036 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Subtraction terms
☐ 037 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Subtraction—Inverse process
☐ 038 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

104

Conversions—mixed nos to improper fractions
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds factors
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds common factors
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Finds lowest common denominators
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Addition of unlike fractions
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Addition of mixed numbers
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Addition of three or more fractions
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Subtraction of unlike fractions
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Subtraction of mixed numbers
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—fractions × fractions
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—fractions × whole numbers
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—fractions × mixed numbers
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplies mixed numbers
☐ 025 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication—whole numbers × mixed numbers
☐ 026 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Divides fractions
☐ 027 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Divides whole numbers by fractions
☐ 028 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 029 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

105 SYMBOLS

TI	REQ	GRADES	MASTERY

T

Minus, plus, equal signs
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Dollar and cents signs
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication and division signs
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Greater than, less than signs
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Roman numerals
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

108

Clock time—half hour
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Clock time—quarter hour
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Clock time—minutes
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calendar—days of week
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calendar—months of year
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Calendar—locate specific dates
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Money—identifies coins
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Money—shows equivalencies
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Money—makes change
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Linear terms
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Linear term abbreviations
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Linear signs—', "
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Linear—knows how to measure
☐ 014 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Linear—makes conversions
☐ 015 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight terms
☐ 016 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight term abbreviations
☐ 017 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight estimates
☐ 018 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight conversions
☐ 019 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Liquid conversions
☐ 020 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Reads temperatures
☐ 021 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Time conversions
☐ 022 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Time computations
☐ 023 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Time zones
☐ 024 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

109

Computes perimeter
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Computes area
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Computes radius of circle
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Computes circumference
☐ 010 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Computes volume
☐ 011 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Uses geometric formulas
☐ 012 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 013 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

110 METRIC SYSTEM

TI	REQ	GRADES	MASTERY

T

Length—place value
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Length—terms
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Length—term abbreviations
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Length—conversions
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Capacity abbreviations
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Capacity conversions
☐ 006 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight/mass abbreviations
☐ 007 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Weight/mass conversions
☐ 008 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Other skill within strand
☐ 009 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

111 DECIMAL/PERCENT/RATIO

TI	REQ	GRADES	MASTERY

T

Recognizes decimals
☐ 001 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Addition of decimals
☐ 002 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Subtraction of decimals
☐ 003 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Multiplication of decimals
☐ 004 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③
Division of decimals
☐ 005 ○ Ⓟ Ⓢ Ⓜ Ⓟ Ⓝ Ⓢ Ⓡ ① ② ③

SSN

TEACHER NAME

☐ 036 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Subtraction terms

☐ 037 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Subtraction—Inverse process

☐ 038 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication—0 × any number

☐ 039 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication—1 × any number

☐ 040 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication tables (2—12)

☐ 041 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication terms

☐ 042 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication—3 digits × 3 digits

☐ 043 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication—4 digits × 3 digits

☐ 044 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication—4 digits × 4 digits

☐ 045 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division terms

☐ 046 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division—Inverse process

☐ 047 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division—4 digits by 3 digits with remainder

☐ 048 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division—5 digits by 3 digits with remainder

☐ 049 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 050 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

104 FRACTIONS

TI REQ GRADES MASTERY

T

Recognizes one-half

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes one-third

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes one-fourth

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes one-eighth

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Creates fraction

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Addition of like fractions

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Subtraction of like fractions

☐ 007 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes improper fractions

☐ 008 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes mixed fractions

☐ 009 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes reduced fractions

☐ 010 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Greater than/less than using fractions

☐ 011 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Terms—numerator, denominator

☐ 01 ⓅⓈⓂⓅⓃⓈⓇ①②③

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Greater than, less than signs

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Roman numerals

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

106 STRUCTURE

TI REQ GRADES MASTERY

T

1/10/100 place value

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

1,000/10,000/100,000 place value

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Millions place value

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Knows expanded notation

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Rounds number to ten's place

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Rounds numbers to hundred's place

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Rounds numbers to thousand's place

☐ 007 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Rounds numbers to ten thousand's place

☐ 008 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Rounds numbers to hundred thousand's place

☐ 009 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Averages numbers

☐ 010 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Reads graphs

☐ 011 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Interprets graphs

☐ 012 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Constructs graphs

☐ 013 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 014 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

107 WORD PROBLEMS

TI REQ GRADES MASTERY

T

One-step subtraction

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

One-step addition

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

One-step division

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

One-step multiplication

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Two step word problems

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

108 MEASUREMENT

TI REQ GRADES MASTERY

T

Clock time—o'clock

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②

☐ 022 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Time computations

☐ 023 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Time zones

☐ 024 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Time word problems

☐ 025 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Calendar terms

☐ 026 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Calendar conversions

☐ 027 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Calendar word problems

☐ 028 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Linear word problems

☐ 029 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Linear estimation

☐ 030 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Liquid terms

☐ 031 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Liquid term abbreviations

☐ 032 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Liquid estimations

☐ 033 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Liquid word problems

☐ 034 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Dry measure terms

☐ 035 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Dry measure abbreviations

☐ 036 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Dry measure estimations

☐ 037 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Dry measure conversions

☐ 038 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Temperature terms

☐ 039 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Temperature abbreviations

☐ 040 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Temperature conversions

☐ 041 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 042 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

109 GEOMETRY

TI REQ GRADES MASTERY

T

Recognizes geometric shapes

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Higher level geometric shapes

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes geometric terminology

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Applies geometric terms

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Identify/Measure angles

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Computes diameter of circle

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication of decimals

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division of decimals

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Converts fractions to decimals

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Decimal word problems

☐ 007 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Recognizes percentage

☐ 008 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Converts percent to decimal

☐ 009 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Percentage word problems

☐ 010 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Ratio word problems

☐ 011 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 012 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

112

Set terminology

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

113 INTEGERS

TI REQ GRADES MASTERY

T

Terms

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Numeration—positive, negative numbers

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Sequence numbers from small to large

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Addition of integers

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Subtraction of integers

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Multiplication of integers

☐ 006 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Division of integers

☐ 007 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skill within strand

☐ 008 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

114 SURVIVAL SKILLS

TI REQ GRADES MASTERY

T

Interprets earnings statement

☐ 001 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Uses information in advertisement

☐ 002 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Completes bank deposit slip

☐ 003 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Completes check

☐ 004 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Balances checkbook statement

☐ 005 ○ⓅⓈⓂⓅⓃⓈⓇ①②③

Other skills not on checklist

☐ 006 ○ⓅⓈⓂⓅⓃ①②③

Allegheny Intermediate Unit

Form 2

Exceptional Children's Program
Improved Individual Instruction Program
Request for Resource Material

Teacher Number 105-35-4485

Student Number	For which objectives do you want resources?			
30885	001 041 P	001 046 P	001 049 P	100 003 S
	009 021 P	008 036 P	101 003 P	109 061 S
	☐	☐	☐	☐
	☐	☐	☐	☐
40663	103 067 P	004 011 P	003 008 S	102 005 S
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

****
ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
IMPROVED INDIVIDUAL INSTRUCTION PROGRAM
****

REQUEST FOR SPECIFIC MATERIAL ON RESOURCE LIST

TEACHER NAME ______________________

DATE OF REQUEST______________________

COMPLETE THE FOLLOWING ON EACH RESOURCE YOU ARE REQUESTING. THE NECESSARY INFORMATION CAN BE TAKEN DIRECTLY FROM THE RESOURCE LIST PRINT-OUT. IN SOME CASES, ALL OF THE FOLLOWING INFORMATION MAY NOT APPEAR. WHEN THAT OCCURS, GIVE ONLY WHAT IS PRINTED ON THE RESOURCE LIST. REQUESTS SHOULD BE KEPT SHORT AND ORDERED PERIODICALLY RATHER THAN ALL AT ONCE. EXTRA PAGES MAY BE SAVED FOR LATER USE.

SAMPLE

STRAND/SKILL NUMBER	RESOURCE NUMBER (5 DIGIT IN PARENS)	PUBLISHER	PROGRAM TITLE	BOOK TITLE	LEVEL	PAGE NUMBERS
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________
____/____	________	______________	________________	________________	____	________________

REQUEST FOR MASTERY TESTS

PLEASE LIST THE STRAND/SKILL NUMBERS AND LEVEL FOR MASTERY TESTS YOU ARE REQUESTING. REQUESTS SHOULD BE KEPT SHORT AND ORDERED PERIODICALLY RATHER THAN ALL AT ONCE.

STRAND/SKILL NUMBERS	LEVEL	STRAND/SKILL NUMBERS	LEVEL	STRAND/SKILL NUMBERS	LEVEL	STRAND/SKILL NUMBERS	LEVEL
____/____	____	____/____	____	____/____	____	____/____	____
____/____	____	____/____	____	____/____	____	____/____	____
____/____	____	____/____	____	____/____	____	____/____	____
____/____	____	____/____	____	____/____	____	____/____	____
____/____	____	____/____	____	____/____	____	____/____	____

14112 G.S.
PRINTED IN U.S.A.

****
ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
MANAGEMENT AND ASSESSMENT PROGRAM
****
JAN. 27, 1981
TEACHER CLASS LIST FOR [redacted]

DISTRICT : [redacted]
BUILDING : [redacted]
PROGRAM : LEARNING DISABILITY
TEACHER #: [redacted]

TEACHER PHONE #: -

SAMPLE

1. CHECK BOX THAT APPLIES FOR EACH STUDENT WHOSE SCAN SHEET CHECKLIST IS ENCLOSED WITH THIS SHEET.

STUDENT NUMBER	STUDENT NAME	(I) IEP	GRADING PERIOD 1	2	3	4	5	6	OTHER (SPECIFY)		
00104	[redacted]										
00102	[redacted]										
00101	[redacted]										
00106	[redacted]										
00105	[redacted]										
00108	[redacted]										
00103	[redacted]										
00099	[redacted]										
00100	[redacted]										
00107	[redacted]										
00109	[redacted]										
04839	[redacted]										

OTHER COMMENTS:______________________________

____

☐ - REQUEST 4-PART IEP'S

☐ - REQUEST FOR RESOURCE LISTING

2. CHECK BOXES THAT APPLY AND GIVE EXPLANATION IN SPACE PROVIDED (IF NECESSARY).

☐ - REQUEST PERFORMANCE REPORTS ______________________________

☐ - JUST ENTER GRADES, NO PERFORMANCE REPORTS REQUIRED ______________________________

☐ - REQUEST 2-PART IEP'S ______________________________

APPENDIX D

```
                    ************************************************
                              ALLEGHENY INTERMEDIATE UNIT
                            EXCEPTIONAL CHILDREN'S PROGRAM
                        IMPROVED INDIVIDUAL INSTRUCTION PROGRAM
                    ************************************************

                               WED., FEB. 27, 1980
                   SUGGESTED RESOURCE LIST FOR GEORGE WASHINGTON


-----------
STRAND #002     STRUCTURAL ANALYSIS SKILLS
SKILL  #035     SELECTS/USES CORRECT PUNCTUATION "."
-----------

STUDENTS WORKING ON THIS STRAND & SKILL:
  00195  Charlie Brown

RESOURCE #1
(00282)
               LEVEL: PRIMARY-YES        LOCATION: CLASSROOM-YES    MASTER TEACHER-NO
  PRIORITY-YES            INTERMEDIATE-YES           REACH R.C.-YES   IIIP LIBRARY-YES
  SUPPLEMENTARY-NO        SECONDARY-YES

  PUBLISHER--BARNELL LOFT, LTD.
  RESOURCE INFORMATION--CAPITALIZATION AND PUNCTUATION, BOOK A, UNIT 7 (1972), REACH #50-039

RESOURCE #2
(00283)
               LEVEL: PRIMARY-YES        LOCATION: CLASSROOM-YES    MASTER TEACHER-NO
  PRIORITY-YES            INTERMEDIATE-YES           REACH R.C.-YES   IIIP LIBRARY-YES
  SUPPLEMENTARY-NO        SECONDARY-YES

  PUBLISHER--BARNELL LOFT, LTD.
  RESOURCE INFORMATION--CAPITALIZATION AND PUNCTUATION, BOOK B, UNIT 7 (1972), REACH #50-040

RESOURCE #3
(00285)
               LEVEL: PRIMARY-NO         LOCATION: CLASSROOM-YES    MASTER TEACHER-NO
  PRIORITY-YES            INTERMEDIATE-YES           REACH R.C.-YES   IIIP LIBRARY-YES
  SUPPLEMENTARY-NO        SECONDARY-YES

  PUBLISHER--STECK-VAUGHN CO.
  RESOURCE INFORMATION--LANGUAGE EXERCISES, SILVER BOOK, 1973, PP. 7, 9, 10, 15, 35, 93-96, 33,25
```

APPENDIX E

ALLEGHENY INTERMEDIATE UNIT
INDIVIDUALIZED EDUCATION PROGRAM

Sample

GENERAL DATA

STUDENT- [redacted] PHONE-

PARENT,GUARDIAN, OR OTHER______________________________

ADDRESS____

ATTEMPTS AND RESULTS OF PARENTAL CONTACT(S)

PLEASE INDICATE WHEN AND WHAT TYPE OF PARENTAL NOTIFICATION WAS UTILIZED TO INVITE PARENTS TO ATTEND THE IEP CONFERENCE AND THEN INDICATE WHAT THE PARENT RESPONSE WAS TO EACH NOTIFICATION. PERSON(S) RESPONSIBLE FOR NOTIFICATIONS SHOULD INITIAL APPROPRIATE BOXES.

NOTIFICATIONS	DATE	LETTER	PHONE	HOME/SCHOOL VISIT	PARENTAL RESPONSE
FIRST					
SECOND					
THIRD					

IEP PLANNING TEAM

THE FOLLOWING PERSONS HAVE PARTICIPATED IN THE INDIVIDUALIZED EDUCATION PROGRAM PLANNING CONFERENCE:

NAME	TITLE
[redacted]	TEACHER- LEARNING DISABILITY

SCHEDULE

DATE OF IEP CONFERENCE______________
DATE(S) OF ANNUAL REVIEW____________
DATE OF LAST RE-EVALUATION--04/11/80

ALLEGHENY INTERMEDIATE UNIT
INDIVIDUALIZED EDUCATION PROGRAM

GENERAL DATA:

STUDENT: [redacted]

BIRTHDATE: [redacted]

PHONE:

PRIVATE SCHOOL______
____

SCHOOL DISTRICT: [redacted]

BUILDING: [redacted].

REGULAR EDUCATION PARTICIPATION: THE STUDENT WILL, AT THIS TIME, PARTICIPATE IN REGULAR EDUCATION: ALL( ), MOST( ), PART( ), OR NONE( ) OF THE TIME AT THE ______ GRADE.

SPECIAL EDUCATION ASSIGNMENT(S):	PROJECTED DATES BEGINNING	PROJECTED DATES ENDING	SPECIAL MEDIA/MATERIALS
LEARNING DISABILITY	09/02/80	ONGOING	____________
____________________________	______	_______	____________
____________________________	______	_______	____________

RELATED SERVICES:

____________________________	______	_______	____________
____________________________	______	_______	____________
____________________________	______	_______	____________
____________________________	______	_______	____________

PRESENT EDUCATION LEVELS

WIDE RANGE ACHIEVEMENT TEST SCORES:

READING WORD RECOGNITION: . GRADE LEVEL

ARITHMETIC: . GRADE LEVEL

SPELLING: . GRADE LEVEL

CO[illegible]TER GENERATED PORTION-IEP STUDENT: [redacted]

PAGE [illegible] 1
SCHOOL YEAR: 1980[illegible]981

INSTRUCTIONAL AREA:
ANNUAL GOAL:

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS

INSTRUCTIONAL AREA:
ANNUAL GOAL:

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS

CO[illegible]TER GENERATED PORTION-IEP STUDENT: [redacted] PAGE [illegible] 2
SCHOOL YEAR: 1980[illegible]981

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: PHONIC ANALYSIS SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
IDENTIFIES/PRODUCES INITIAL BLENDS	APPROP. MASTERY TEST 001/111-001/129	TEACHER EVALUATION AT ____ ACCURACY	
IDENTIFIES INITIAL CONSONANT DIGRAPHS	APPROP. MASTERY TEST 001/139-001/143	TEACHER EVALUATION AT ____ ACCURACY	
IDENTIFIES SHORT VOWEL SOUNDS	APPROP. MASTERY TEST 001/153-001/157	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: STRUCTURAL ANALYSIS SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
SELECTS/USES CORRECT PUNCTUATION	APPROP. MASTERY TEST 002/035-002/040	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	

CO[illegible]TER GENERATED PORTION-IEP STUDENT: [redacted] SCHOOL YEAR: 1980[illegible]981

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: WORD RECOGNITION SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
CALLS/SAYS 2ND GRADE, 1ST LEVEL WORDS	APPROP. MASTERY TEST 003/004	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: ORAL READING SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
ORAL READING SKILLS, SECOND GRADE LEVEL	APPROP. MASTERY TEST 004/003	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION AT ____ ACCURACY	

INSTRUCTIONAL AREA: READING
ANNUAL GOAL: STUDY SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
ALPHABETIZES WORDS	APPROP. MASTERY TEST 009/005-009/008	TEACHER EVALUATION: AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT ____ ACCURACY	
	APPROP. MASTERY TEST	TEACHER EVALUATION: AT ____ ACCURACY	

INSTRUCTIONAL AREA: MATH
ANNUAL GOAL: MATHEMATIC PROCESSES

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
SUBTRACTS COMBINATIONS OF DIGITS	APPROP. MASTERY TEST 103/010-103/017	TEACHER EVALUATION: AT ____ ACCURACY	
MULTIPLIES COMBINATIONS OF DIGITS	APPROP. MASTERY TEST 103/024-103/029	TEACHER EVALUATION: AT ____ ACCURACY	
DIVIDES COMBINATIONS OF DIGITS,NO REMAIN	APPROP. MASTERY TEST 103/032-103/033	TEACHER EVALUATION: AT ____ ACCURACY	
DIVIDES COMBINATIONS OF DIGITS W/REMAIN.	APPROP. MASTERY TEST 103/034-103/035	TEACHER EVALUATION: AT ____ ACCURACY	
KNOWS MULTIPLICATION TABLES 2-12	APPROP. MASTERY TEST 103/041	TEACHER EVALUATION: AT ____ ACCURACY	

INSTRUCTIONAL AREA: MATH
ANNUAL GOAL: MEASUREMENT SKILLS

EDUCATIONAL TASKS--SHORT TERM OBJECTIVE	EVALUATION PROC/COND	SUCCESS CRITERIA	PROGRESS
IDENTIFIES, CONVERTS AND USES MONEY	APPROP. MASTERY TEST 108/008-108/010	TEACHER EVALUATION: AT ____ ACCURACY	

APPENDIX F

****
ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
MANAGEMENT AND ASSESSMENT PROGRAM
****

PERFORMANCE REPORT FORM

STUDENT: [redacted] STUDENT NUMBER: [redacted]
TEACHER:
SCHOOL:
SCHOOL TERM: SUMMARY
DATE: JAN. 22, 1981

SAmplE

PERFORMANCE CODES

M--MASTERY OF SKILL. NO FURTHER GRADES WILL BE GIVEN FOR THIS SKILL.
P--PROGRESS HAS BEEN MADE ON SKILL.
N--NEEDS REMEDIATION
S--STUDENT HAS REACHED FRUSTRATION LEVEL. INSTRUCTION WILL BE STOPPED TEMPORARILY AND RESUMED AT A LATER DATE.
R--STUDENT HAS REGRESSED FROM PREVIOUS PERFORMANCE LEVEL. INSTRUCTION MUST BE RESUMED.

LISTED BELOW ARE THE MAJOR GOALS AND SKILLS WITH WHICH THIS STUDENT HAS BEEN WORKING:

MAJOR GOAL:
001-PHONIC ANALYSIS SKILLS

SKILL:

	MASTERY SCORE	RATING PERIODS 1	2	3	4	5	6
112-IDENTIFIES/GIVES INITIAL BLEND TW	80% +	P	M				
114-IDENTIFIES/GIVES INITIAL BLEND GR	80% +	M	M				
116-IDENTIFIES/GIVES INITIAL BLEND SW	80% +	P	M				
121-IDENTIFIES/GIVES INITIAL BLEND TR	80% +	M	M				
124-IDENTIFIES/GIVES INITIAL BLEND SN	80% +	P	M				
126-IDENTIFIES/GIVES INITIAL BLEND DR	80% +	M	M				
129-IDENTIFIES/GIVES INITIAL BLEND SPL	80% +	P	M				
139-IDENTIFIES INITIAL CONSONANT DIGRAPH		P					
140-IDENTIFIES INITIAL CONSONANT DIGRAPH CH	80% +	P	M				
141-IDENTIFIES INITIAL CONSONANT DIGRAPH TH	80% +	P	M				
142-IDENTIFIES INITIAL CONSONANT DIGRAPH PH	80% +	P	M				
143-IDENTIFIES INITIAL CONSONANT DIGRAPH WH	80% +	P	M				
155-IDENTIFIES SHORT VOWEL SOUND I		P					

```
PERFORMANCE REPORT FORM   [redacted]                  SUMMARY          PAGE

                                                        RATING PERIODS
                                                      ------------------
                                             MASTERY   1  2  3  4  5  6
                                              SCORE   ------------------
MAJOR GOAL (CONT.):
    001-PHONIC ANALYSIS SKILLS

  SKILL:

    156-IDENTIFIES SHORT VOWEL SOUND O                 P
    157-IDENTIFIES SHORT VOWEL SOUND U                 P

MAJOR GOAL:
    002-STRUCTURAL ANALYSIS SKILLS

  SKILL:

    035-SELECTS/USES CORRECT PUNCTUATION "."
    036-SELECTS/USES CORRECT PUNCTUATION "?"
    040-SELECTS/USE CORRECT PUNCTUATION CAPITALS       P

MAJOR GOAL:
    003-WORD RECOGNITION SKILLS

  SKILL:

    004-CALLS/SAYS 2ND GRADE, 1ST LEVEL WORDS          P

MAJOR GOAL:
    004-ORAL READING SKILLS

  SKILL:

    003-ORAL READING SKILLS, 2ND GRADE LEVEL           P

MAJOR GOAL:
    009-STUDY SKILLS

  SKILL:

    006-ALPHABETIZING W/ DICTIONARY - 2ND LETTER  80% + M
    007-ALPHABETIZING W/ DICTIONARY - 3RD LETTER       P
    008-ALPHABETIZING/W DICTIONARY-4TH LETTER

MAJOR GOAL:
    103-MATHEMATIC PROCESSES

  SKILL:

    014-SUBT - 2 DIGIT MINUS 1 DIGIT W/ REGROUP   90% + P  M
```

PERFORMANCE REPORT FORM [redacted] SUMMARY PAGE 3

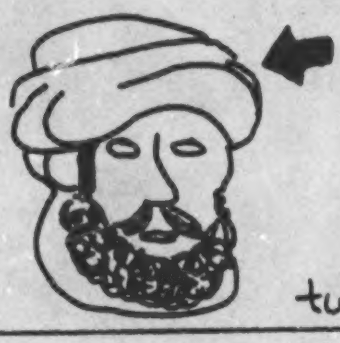
	MASTERY SCORE	RATING PERIODS 1	2	3	4	5	6
MAJOR GOAL (CONT.): 103-MATHEMATIC PROCESSES							
SKILL:							
016-SUBT - 2 DIGIT MINUS 2 DIGIT W/ REGROUP	90% +	P	M				
017-SUBTRACTION - 3 DIGIT WITH REGROUP							
024-MULT.-2 DIGIT TIMES 1 DIGIT - NO REGROUP							
025-MULT.-2 DIGIT TIMES 1 DIGIT-W/REGROUP							
026-MULT.-3 DIGIT TIMES 1 DIGIT NO REGROUP							
027-MULT.-3 DIGIT TIMES 1 DIGIT - W/ REGROUP							
032-DIVISION-2 DIGIT BY 1 DIGIT NO REMAINDER							
033-DIVISION-3 DIGIT BY 1 DIGIT NO REMAINDER							
034-DIVISION-3 DIGIT BY 1 DIGIT W/ REMAINDER							
041-KNOWS MULTIPLICATION TABLES 2 - 12		P	P				
MAJOR GOAL: 108-MEASUREMENT SKILLS							
SKILL:							
010-MONEY SKILLS - MAKES CHANGE		P					

APPENDIX G

001-183
P

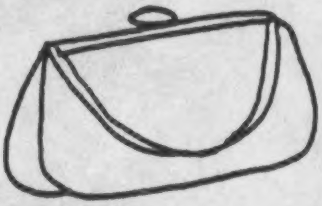
Say the name of each picture.
Circle its correct name. MASTERY TEST

turnip turn



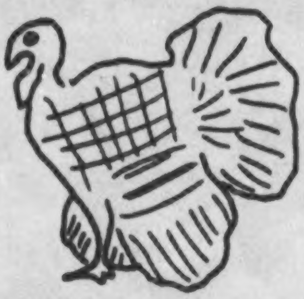
turban turkey

pretty purple



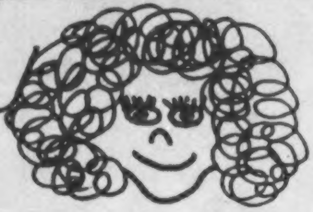
purse prattle

turban turn



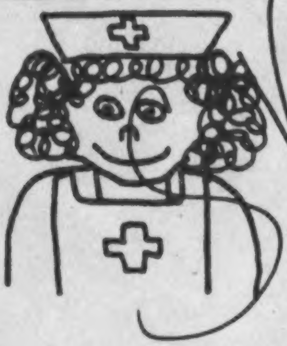
turkey turnip

church curtse



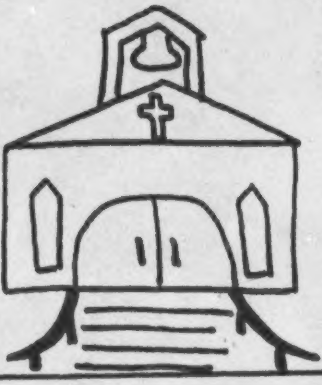
circle curls

nurse nursery



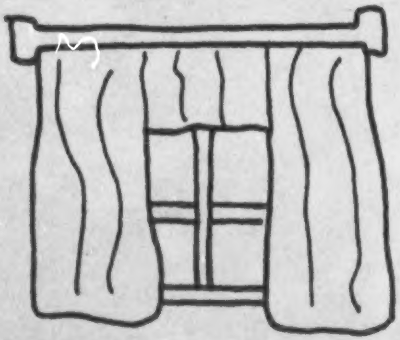
north nervous

curtains curtse



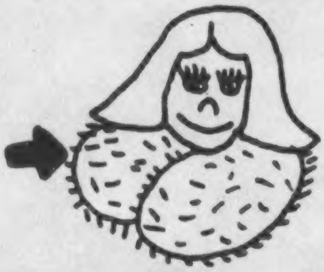
church curls.

curls curtains



church court

fur fern



fertile far

1 S

001-172

MASTERY TEST

Supply the correct word with its meaning. All the answers begin with "qu".

1. ________________ to stop

2. ________________ odd, weird

3. ________________ a cover for a bed

4. ________________ a king's wife

5. ________________ twenty-five cents

6. ________________ a noise made by a duck

7. ________________ an offensive back in football who usually lines up behind the center and calls the plays

8. ________________ to argue

9. ________________ a short oral or written test

10. ________________ to ask something

SAMPLE

ALLEGHENY INTERMEDIATE UNIT

EXCEPTIONAL CHILDREN'S PROGRAM
Suite 1300 - Two Allegheny Center
Pittsburgh, Pennsylvania 15212

Dr. Harold E. Oyer, Executive Director
Dr. D. Roger Meehan, Assistant Executive Director,
Exceptional Children's Program
Barbara A. Minick, Project Director

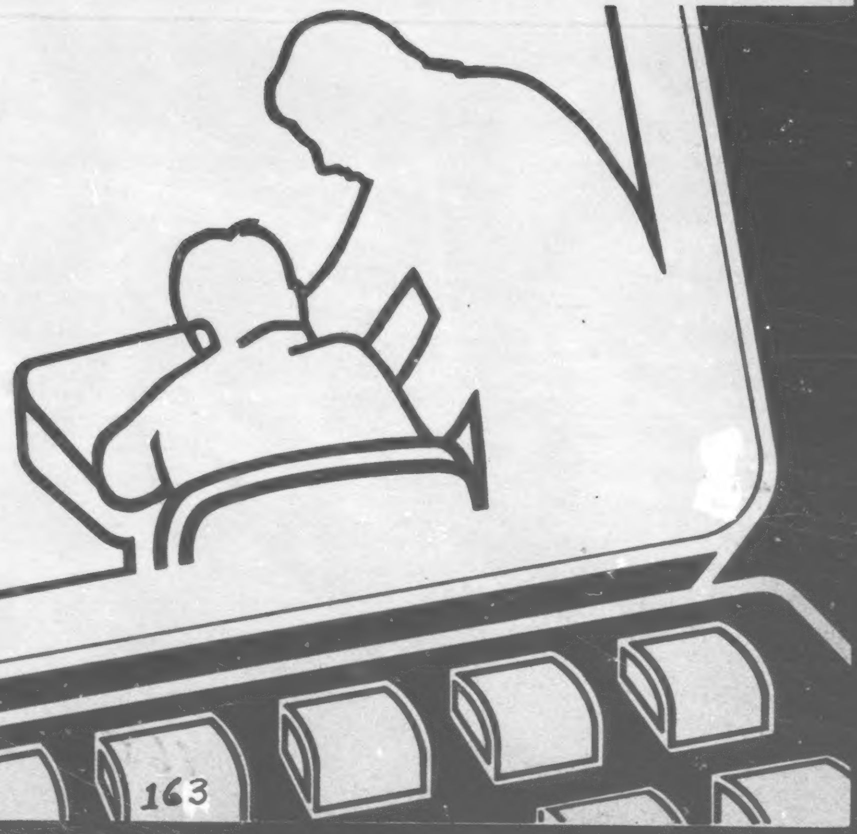
"It is the policy of the Allegheny Intermediate Unit that no persons shall be subjected to discrimination on the grounds of race. color, religious creed, ancestry, national origin, age, sex, marital status and handicap or disability."

The Improved Individual Instruction Program is funded under the U.S. Office of Education, Department of Health, Education and Welfare, Bureau of Education of the Handicapped, Title VI-E, Grant No. G007701317.

Bonnie Minick
Improved Individual Instruction Program
ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
Suite 1300 - Two Allegheny Center
Pittsburgh, Pennsylvania 15212

improved individual instruction program

ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM



163

What is the improved individual instruction program (IIIP)?

The Improved Individual Instruction Program (IIIP) is a computerized record-keeping and resource listing system designed to assist teachers with tracking student performance and suggesting possible teaching materials and techniques.

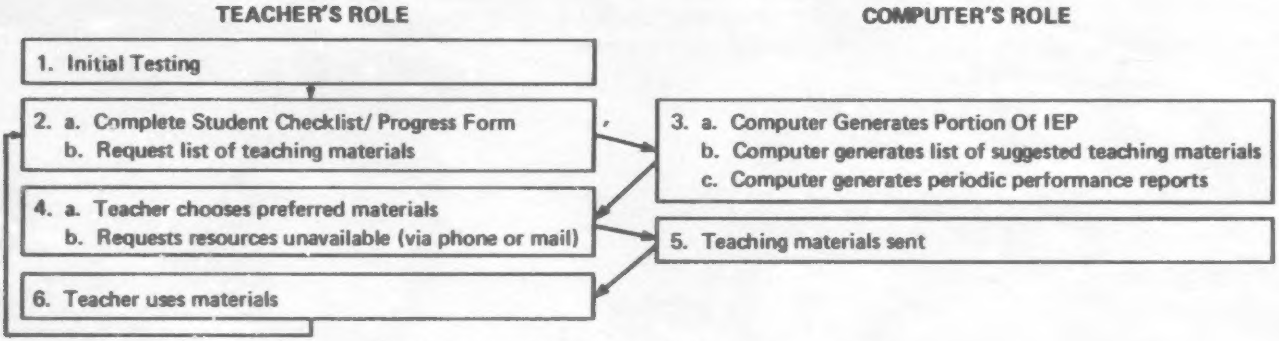
The IIIP includes an initial test series which permits the teacher to identify math and reading skill deficiencies. Once the deficiencies have been identified, the computer can assist in generating a portion of the Individualized Education Program (IEP). An individualized education program or IEP is a statement describing a child's present level of educational performance in various academic areas. Annual goals and short term instructional objectives are established based on the student's performance in these academic areas. The program includes a sequence of math and reading skills to help the teacher implement the IEP.

In addition, the computer provides periodic performance reports on a student's progress throughout the year.

The IIIP can also match teaching materials and techniques to individual skill needs. Teaching materials can be obtained on a loan basis from the IIIP Resource Center by teachers who are utilizing the program.

How does it work?

Here's A Flowchart Which Shows You How To Use The Improved Individual Instruction Program


TEACHER'S ROLE
COMPUTER'S ROLE
1. Initial Testing
2. a. Complete Student Checklist/ Progress Form
b. Request list of teaching materials
3. a. Computer Generates Portion Of IEP
b. Computer generates list of suggested teaching materials
c. Computer generates periodic performance reports
4. a. Teacher chooses preferred materials
b. Requests resources unavailable (via phone or mail)
5. Teaching materials sent
6. Teacher uses materials

A closer look at the program

Initial Test/Individualized Education Program

A reading and math test is administered to each student entering the program. Based upon information received from the testing, the teacher has an academic profile which he or she can use to identify skill deficiencies. The teacher then codes those skill deficiencies on a computer input sheet. At that point the computer takes over and generates a portion of the IEP designed to correct those deficiencies. This portion does not represent a complete IEP but rather identifies certain basic skills needing remediation during the current year. In addition, the system can provide annual goals and short term objectives as well as evaluation procedures. Teachers must still identify additional academic and perceptual areas and must determine success criteria in every instance.

Suggested Resource Materials

The computerized resource information bank generates a list of suggested resource materials and teaching strategies that are appropriate for individual student's needs. All suggested materials are readily available to the teacher in his/her own classroom or through the Western Pennsylvania Special Education Regional Resource Center. In addition to these sources, teachers may also borrow selected materials from the IIIP Resource Center which has been specifically designed as a lending service.

Mastery Tests

Mastery tests are available as part of the IIIP to assess performance in each math and reading skill area. Tests have been designed for use at the primary, intermediate and secondary levels.

Performance Reports

The system automatically produces individual student performance reports four to six times a year. The report form parallels the objectives on the IEP and contains a more detailed listing of skills matched to periodic performance updates.

For more information on the III Program, complete and mail the bottom portion of this brochure.

……

I am interested in receiving information on these components:

- ☐ Initial Tests in Math and Reading
- ☐ Individualized Education Program (IEP)
- ☐ Resource Materials
- ☐ Mastery Tests
- ☐ Performance Reports

NAME ______________________________

ADDRESS ____________________ AGENCY ____________________

CITY ______________ STATE ______________ ZIP ______________

PHONE ____________________
(Area Code)

WHAT ARE THE DIFFERENCES?

The enormous bonus for using the computer-generated portion of the I.E.P. is the time-savings for the teacher which results in more instructional time for your student. The skill descriptions on the computer-generated portion are more specific, and matching mastery tests to measure performance are available at appropriate levels.

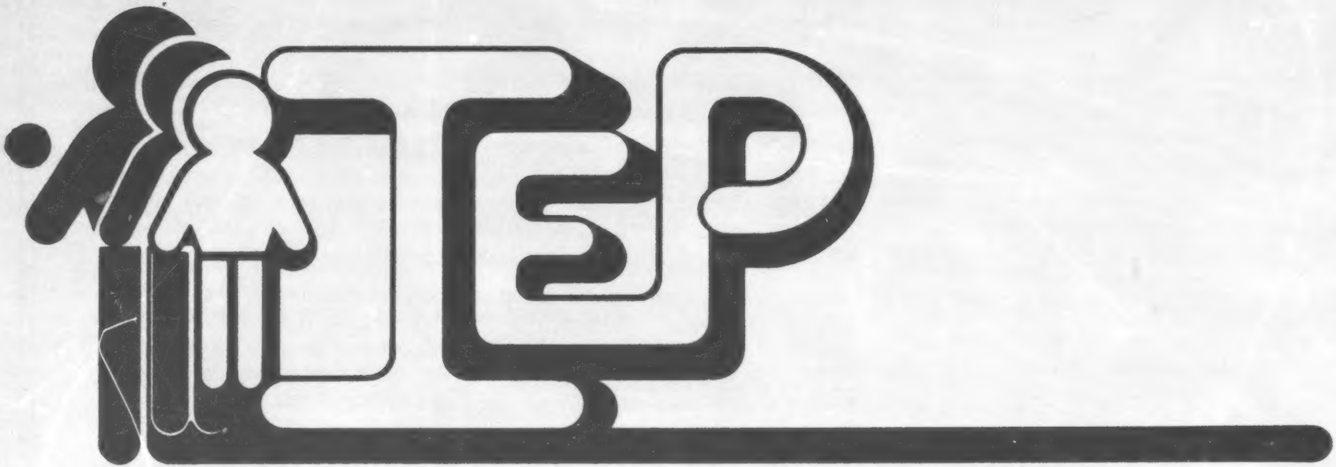
It is important to remember that each I.E.P., whether hand-written or a computer-generated portion, is prescribed individually by your child's teacher. The actual information contained on each I.E.P. format is identical, though skills on the computer-generated portion are more specific. Additional skills and information in any area can be added by parents or the teacher. Skills on either format can also be deleted by the parents or the teacher. The success criteria on both forms is always hand-written and determined solely for your particular child by his or her teacher.

One additional benefit to the computer-generated portion of the I.E.P. is the fact that periodic performance updates on your child's progress can be obtained at any time during the year.

"It is the policy of the Allegheny Intermediate Unit that no persons shall be subjected to discrimination on the grounds of race, color, religious creed, ancestry, national origin, age, sex, marital status and handicap or disability."

Bonnie Minick
Improved Individual Instruction Program
ALLEGHENY INTERMEDIATE UNIT
EXCEPTIONAL CHILDREN'S PROGRAM
Suite 1300, Two Allegheny Center
Pittsburgh, PA 15212

Nonprofit Org.
U.S. Postage
PAID
Pittsburgh, PA.
Permit No. 939



computer-generated • hand-written

167-a

AN IEP TIME-SAVER

for teachers and parents

For the past two years you have been attending conferences with your child's teacher to develop an I.E.P. The individualized education program is a statement describing your child's present level of educational performance in various academic areas. Annual goals and short term instructional objectives are established based on these academic areas. Evaluation procedures for a successful criteria are established to project a time line for meeting each objective.

In the past, these conferences have tended to be lengthy for both you and the teacher, leaving little time for discussion of your concerns. In order to make more time available to you, the A.I.U. is experimenting with a computerized portion of an I.E.P. The computer generated portion of the I.E.P. is no different from the skills which appear on the hand-written I.E.P.

The Learning Disabilities Program has identified workable and measurable skills your child needs to know from kindergarten through high school. These have been computerized and rather than having the L.D. teacher copy all of these skills he/she merely needs to identify those skills that a child will need to work on for that particular year.

The following chart compares the differences between the Computer-Generated I.E.P. and the Hand-Written I.E.P.

	COMPUTER - GENERATED	HANDWRITTEN
General Data	Name, address, phone number, etc.	Name, address, phone number, etc.
IEP Planning Team	Persons who have participated in the IEP planning conference.	Persons who have participated in the IEP planning conference.
Schedule	Dates of conference and re-evaluation.	Dates of conference and re-evaluation.
Educational Background Information	Pertinent data regarding regular and special education participation and related services.	Pertinent data regarding regular and special education participation and related services.
Present Educational Level	Includes most recent test score information.	Includes most recent test score information.
Instructional Area	Reading, Math, etc.	Reading, Math, etc.
Annual Goal	Long term objectives based on academic curricula. Teachers' handwritten goals have been entered into the computer. Based on your child's test information, the appropriate annual goals appear for your individual student as prescribed by your child's teacher.	Long term objectives based on academic curricula. This is hand-written based on your child's individual assessment.
Educational Tasks	Individual skill areas needing attention (initial consonants, long and short vowels, etc.) found under each annual goal. Teachers' handwritten individual skill areas have been entered into the computer. Based	Individual skill areas needing attention (initial consonants, long and short vowels, etc.) found under each annual goal.

	COMPUTER - GENERATED	HANDWRITTEN
General Data	Name, address, phone number, etc.	Name, address, phone number, etc.
IEP Planning Team	Persons who have participated in the IEP planning conference.	Persons who have participated in the IEP planning conference.
Schedule	Dates of conference and re-evaluation.	Dates of conference and re-evaluation.
Educational Background Information	Pertinent data regarding regular and special education participation and related services.	Pertinent data regarding regular and special education participation and related services.
Present Educational Level	Includes most recent test score information.	Includes most recent test score information.
Instructional Area	Reading, Math, etc.	Reading, Math, etc.
Annual Goal	Long term objectives based on academic curricula. Teachers' handwritten goals have been entered into the computer. Based on your child's test information, the appropriate annual goals appear for your individual student as prescribed by your child's teacher.	Long term objectives based on academic curricula. This is hand-written based on your child's individual assessment.
Educational Tasks	Individual skill areas needing attention (initial consonants, long and short vowels, etc.) found under each annual goal. Teachers' handwritten individual skill areas have been entered into the computer. Based on your child's test information, the appropriate skill areas appear for your individual student as prescribed by your child's teacher.	Individual skill areas needing attention (initial consonants, long and short vowels, etc.) found under each annual goal.
Evaluation Procedures/ Conditions	Specific tests to assess your child's performance on a particular skill. Teachers' handwritten tests have been developed to match each specific skill at various academic levels. This innovative technique has never been used in our program before.	Specific tests to assess your child's performance on a particular skill.
Success Criteria	Level of mastery for a student as determined by his teacher. This will be handwritten.	Level of mastery for a student as determined by his teacher. This will be handwritten.
Progress	Teacher indicates date in which the child has mastered the skill. This is handwritten.	Teacher indicates date child has mastered skill. This is handwritten.
Additional Skills by Parent or Teacher	Can be added anywhere on the IEP. Any information on the computer-generated portion can also be deleted.	Can be added anywhere on the IEP.

The computer stores academic and performance information on your student. It has the capacity to print this information in an IEP format, but the teacher must prescribe appropriate skills for each individual student. The computer cannot generate nor can it store an IEP.

Updated performance information – can be stored on your particular student and shared upon request.